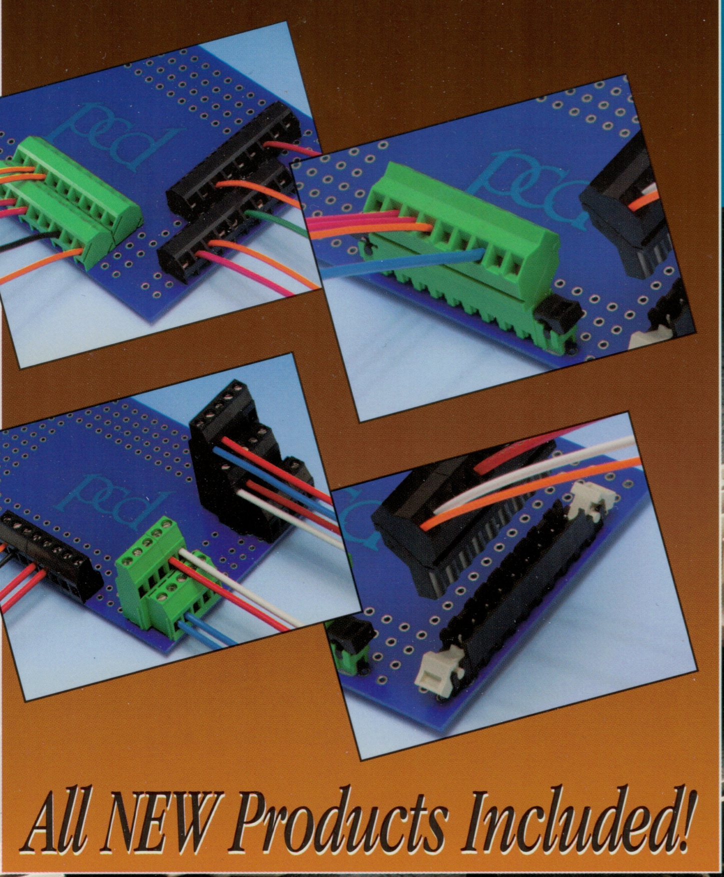
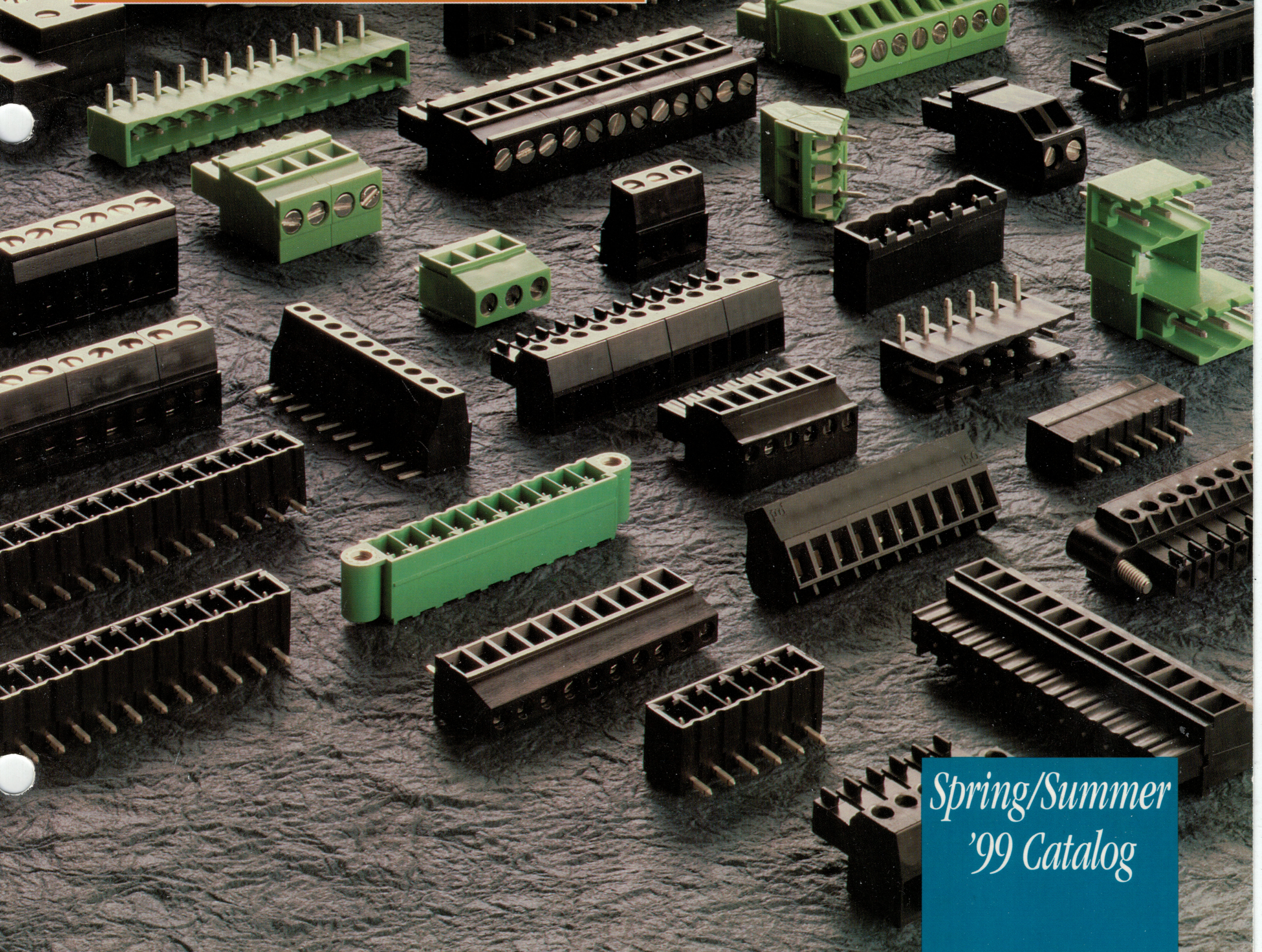
pcd

Wire-to-Board Terminal Blocks



All NEW Products Included!



Spring/Summer '99 Catalog

Introduction and Corporate Profile

Founded in 1977, PCD concentrates its technical and manufacturing resources on specialized areas of advanced connector technology. By combining extremely rapid and reliable delivery response with exceptional product engineering, PCD has earned a growing reputation for superior connector design and supply.

PCD Express

As part of an overall customer service program known as PCD Express, PCD has intentionally structured its in-house fabrication and assembly operations to focus on the minimal inventory/just-in-time delivery needs of its markets. Fully implemented JIT systems and technology — ranging from quick-change tooling to "kanban" stock and lot controls — on terminal blocks and other product lines, assure that PCD meets its goal of providing the fastest production response time in the industry.

The same PCD Express focus on customer service is reflected in PCD's dedication to immediate response to requests for technical information, quotations and samples.

The PCD Express program delivers these essential services:

PCD's main facility in Peabody, Massachusetts houses corporate headquarters, sales and engineering, plastic molding and precision stamping and assembly facilities.

■ *PCD Delivery Express*

Any of the pluggable terminal blocks and headers or fixed blocks indicated on catalog pages, delivered in 10 days or less.

■ *PCD Sample Express*

An evaluation sample of any standard PCD block – pages 3–36 in 48 hours or less. Samples of other industrial connector families within 48 hours if stock is available.

■ *PCD Tech Express*

Expert engineering assistance instantly.

■ *PCD Info Express*

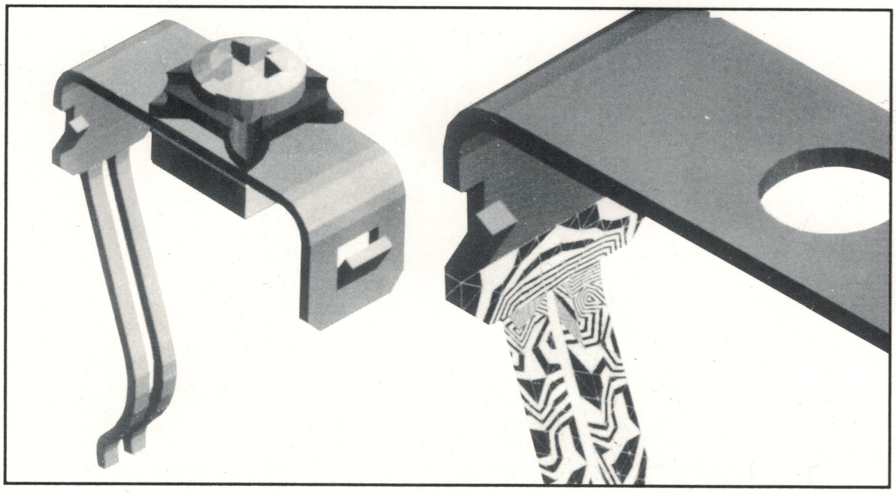
Catalogs, tech data, pricing, etc. provided within 24 hours.

These service efforts are further augmented by PCD's strong national network of franchised, stocking distributors.

Advanced Connector Engineering

PCD's strength lies in its ability to clearly define and understand its markets, and to develop products that represent proven, cost-efficient and highly reliable solutions to their interconnection needs. The company's market position has been further strengthened by its willingness and ability to work intimately and responsively with its customers in both the modification of existing products and development of new products to meet specialized high volume requirements.

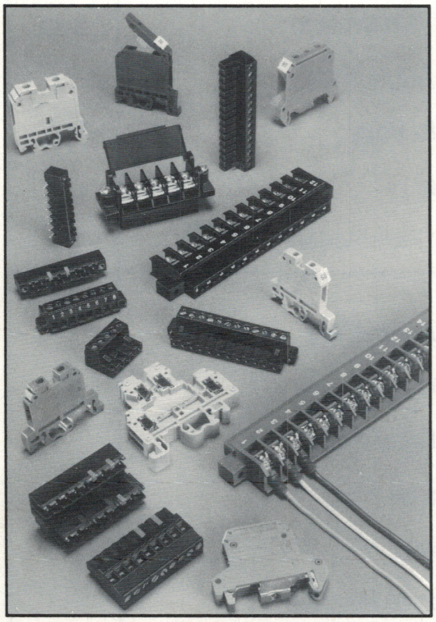
Extensive use of CAD/CAE and related computer and solid modeling capabilities dramatically reduces new and modified connector design time and costs, and helps ensure development of the PCD connector products that best suit intended applications.



NOTE: All data and dimensions in this catalog are intended for use as a guide and all are subject to change without prior notice. PCD Inc. cannot be held liable for any errors, omissions or changes in product details, dimensions or specifications. For those applications where product configurations or dimensions are critical, please contact PCD for detailed engineering drawings and data.

Wire-to-Board Products

Continuing PCD product development has led to a broad and expanding range of standard connector families specifically aimed at the discrete wire terminations and interconnection requirements of the industrial electronics market, plus related applications. These include:



■ *Pluggable Terminal Blocks*

The PCD ELF and ELV line comprise a family of .200"/5.0mm and 150" spacing durable, high temperature pluggable terminal blocks and headers, which provide flexible wire-to-board interconnect solutions for a wide variety of industrial and measurement connector applications. This line is augmented by a range of fixed terminal blocks, designed and built to the same standards.

In addition, PCD's new FlexiPlug pluggable terminal blocks feature U.S. style barrier block wire terminations designed to accomodate a standard screwdriver, and they mate with European-style .200" pluggable headers. These FXP series blocks can be used interchangeably with ELF series blocks as well, ensuring complete flexibility.

■ *Electrocon Terminal Block/Edgecard*

The Electrocon family of discrete wire-to-printed board edgecard connector ranges from .100" to .375" spacing, and covers a broad range of applications and design approaches. The Electrocon sees particularly broad use in programmable controller (PLC) applications.

■ *Custom Connectors*

PCD collaborates with industrial equipment market leaders on a strategic partnership basis in the development of custom I/O connectors specifically tailored to control system and end user requirements. These connectors can range from standard PCD components utilized in a custom housing to broad new designs.

Fully Integrated Production

Extremely rapid delivery response and advanced product design and development remain the core of PCD's strategy. The company supports that capability with vertically integrated manufacturing. In-house production of all key components, coupled with rigorous quality assurance ensure the highest levels of final product quality and performance, as well as timely production and delvery.

Quality: ISO 9001

PCD's commitment to quality on a global scale is underlined by receipt of an International Standards Organization (ISO) 9001 certificate of registration. ISO 9001 is the broadest and most demanding of the ISO 9000 series of standards for quality systems, and covers design, development, production and service. As part of the registration audit process, PCD demonstrated the ability to establish and maintain rigid standards for manufacturing quality, process control documentation and customer satisfaction. ISO 9001 exemplifies PCD's dedication to excellence — and to its customers.

UL, CSA and VDE Approvals

PCD connectors are recognized by Underwriters Laboratories under file numbers E83421 and certified by the Canadian Standards Association under file number LR69703. See product pages for approved details, including VDE 0627 approval.

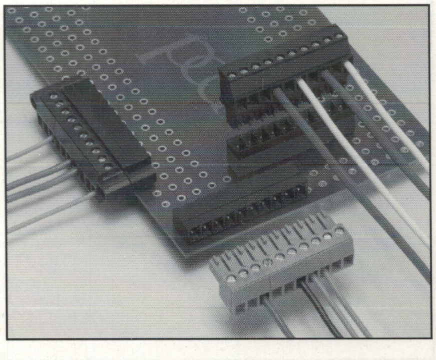
Other PCD Products

Within the avionic market, PCD is the leading supplier of MIL-S-12883 environmentally sealed relay sockets, MIL-T-81714 terminal junction modules and a variety of related relay sockets, electronic modules and sealed wire-to-wire connections for aircraft.

PCD's Wells/CTI subsidiary, located in Indiana and Arizona, is a market leader in the development of high density semiconductor test, burn-in and production sockets and programmable logic sockets. The ball grid array socket (BGA) development from Wells/CTI leads the industry in new technology.

Visit us on the Web at www.pcdinc.com.

Or e-mail us at pcdsales@pcdinc.com.



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	.150"	ELVH Header	
	.150"	ELVM Fixed Termination	
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	NEW 3.5mm	ELXT Straight Plug	
	NEW 3.5mm	ELXH Header	
	NEW 3.5mm	ELXM Fixed Termination	
Pluggable and Fixed Terminal Blocks and Headers, Modular and Non-Modular *Two-Piece and Fixed Mount Wire-to-Board Separable Connectors, up to 20A/300V*	.200"/5.0mm	ELFP Right Angle Plug	13-36
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	.156"	ELC Edgecard	
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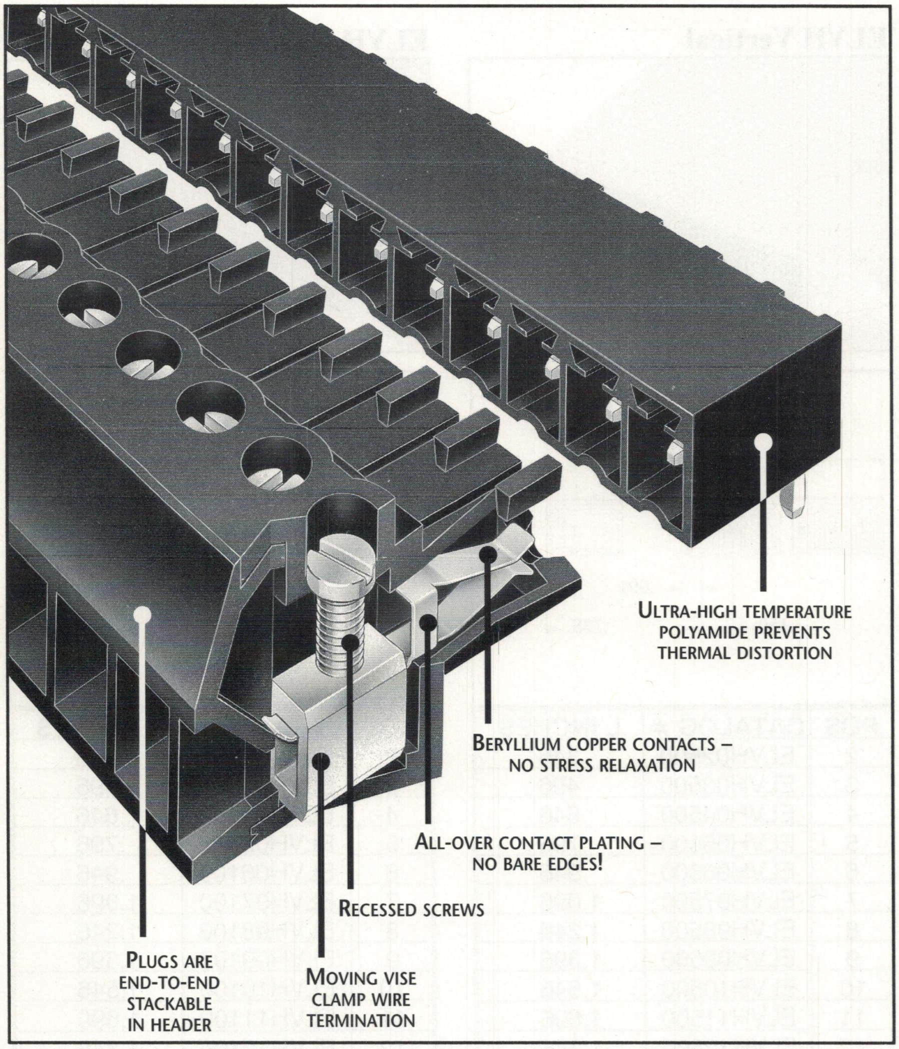

ULTRA-HIGH TEMPERATURE POLYAMIDE PREVENTS THERMAL DISTORTION
BERYLLIUM COPPER CONTACTS – NO STRESS RELAXATION
ALL-OVER CONTACT PLATING – NO BARE EDGES!
RECESSED SCREWS
PLUGS ARE END-TO-END STACKABLE IN HEADER
MOVING VISE CLAMP WIRE TERMINATION

The PCD ELV line is a family of high density, high temperature pluggable and fixed terminal blocks on .150" centers, featuring moving vise clamp wire terminations, between-contact keying capability and many optional mounting and application features.

The ELV line is intermateable and interchangeable with .150" competitive imports, but offers significant differences and advantages in material, design details and service as indicated on the drawing on this page and itemized at right:

PCD Express

JIT production ensures delivery of any standard ELV product—including optional selective gold plating—within 10 days. PCD Express also guarantees evaluation samples in 48 hours, expert technical assistance instantly and information, pricing, etc. overnight.

Contact Material

PCD plug contacts are beryllium copper, selected to eliminate stress relaxation problems, and offer significantly higher normal force after repeated insertions and withdrawals than competitive phosphor bronze equivalents.

Contact Plating

ELV plug contacts are electro-tin plated after blanking and forming, guaranteeing no bare edges on the critical contact mating area. This offers distinct advantages over contacts manufactured from pre-plated stock, which can have bare edges susceptible to corrosion.

Current Rating

Because of superior contact element design and material selection, the PCD ELV line has been given a 12A UL current rating—the highest in the industry. ELV terminal blocks will run cooler—a critical basis for reliable, long term performance.

Plug Stacking

PCD plugs can be stacked side-by-side in PCD headers without losing a contact position. For example, two 6-position plugs are stackable in a 12-position header. Competition does not offer this feature.

Insulation Material

ELV headers—and plugs—are molded of ultra-high temperature glass-filled polyamide. This material offers a deflection temperature to 480°F which is far higher than the lower temperature polyamide used in competitive connectors.

Accessories and Variations

A broad selection of plug and header variations and accessories is readily available from PCD to increase the application flexibility of the ELV line. These are outlined below. See page 7 for details.

- ***Green color***
- ***Gold plated contacts***
- ***Locking ears***
- ***Mounting ears***
- ***Keying***
- ***Marking***

ELVH Mini-Headers Vertical and Horizontal .150"

PRODUCT DESCRIPTIONS

• Plugs

ELVP pluggable terminal blocks feature wire entry parallel to contact and mate with ELVH headers or competitive headers.

ELVT pluggable terminal blocks feature wire entry perpendicular to contact - top or bottom entry is available - and mate with ELVH headers or competitive headers.

Moving vise clamp wire termination permits a wide range of wires (28-16 AWG) to be terminated repeatedly without strand damage. Details of variations and accessories can be found on Page 7.

• Headers

ELVH headers, available in vertical and horizontal versions, are molded of an ultra-high temperature polyamide to prevent deformation during soldering. A shrouded design, along with the capability for keying, prevents mismating. ELVH headers mate with PCD and competitive pluggable terminal blocks. Multiple ELV plugs can be stacked end-to-end in a header without loss of contact position.

• Fixed Terminals

ELVM fixed wire-to-board terminals are available in vertical, angled and horizontal wire entry versions. The ELVM family utilizes the moving vise clamp to terminate the wire range 28-16 AWG. The high temperature polyester housing is molded to size. All three versions are available in 2-10 positions. For marking details, see Page 7.

SPECIFICATIONS

Maximum Operating Temperature: 125° C

Dielectric Withstanding: 1600 V

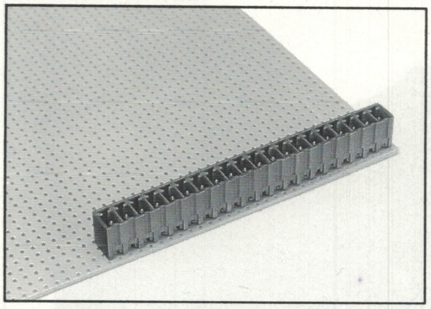
Current Rating: 12 A

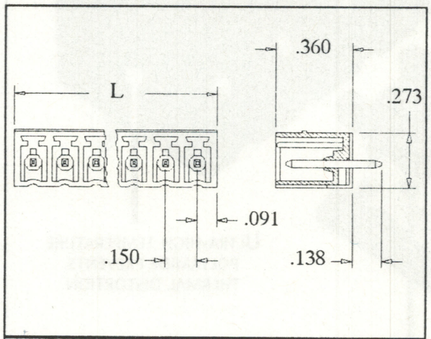
Operating Voltage: 300 VAC RMS

Insulation Resistance: 1000 mΩ @ 60 Hz

Wire Pullout Force: UL486E Section 14

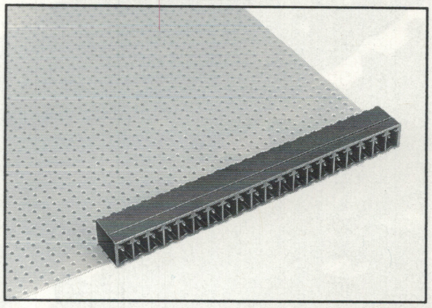
ELVH Vertical

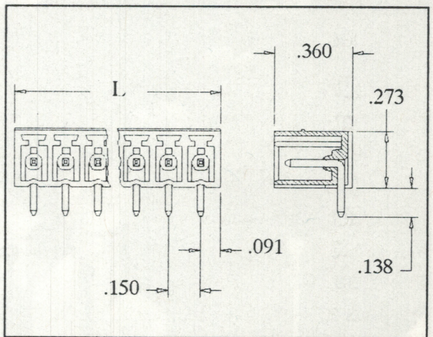




POS	CATALOG #	L INCHES
2	ELVH02500	.346
3	ELVH03500	.496
4	ELVH04500	.646
5	ELVH05500	.796
6	ELVH06500	.946
7	ELVH07500	1.096
8	ELVH08500	1.246
9	ELVH09500	1.396
10	ELVH10500	1.546
11	ELVH11500	1.696
12	ELVH12500	1.846
13	ELVH13500	1.996
14	ELVH14500	2.146
15	ELVH15500	2.296
16	ELVH16500	2.446
17	ELVH17500	2.596
18	ELVH18500	2.746
19	ELVH19500	2.896
20	ELVH20500	3.046

ELVH Horizontal





POS	CATALOG #	L INCHES
2	ELVH02100	.346
3	ELVH03100	.496
4	ELVH04100	.646
5	ELVH05100	.796
6	ELVH06100	.946
7	ELVH07100	1.096
8	ELVH08100	1.246
9	ELVH09100	1.396
10	ELVH10100	1.546
11	ELVH11100	1.696
12	ELVH12100	1.846
13	ELVH13100	1.996
14	ELVH14100	2.146
15	ELVH15100	2.296
16	ELVH16100	2.446
17	ELVH17100	2.596
18	ELVH18100	2.746
19	ELVH19100	2.896
20	ELVH20100	3.046

MATERIALS

Housing: Polyamide, black, UL94V-0 (green optional)

Contact: Copper alloy

Plating: Tin-lead

INSTALLATION

Hole Diameter: .047"

APPROVALS:

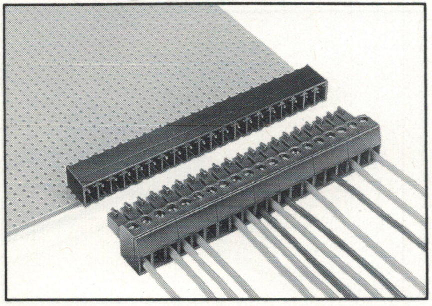
UL Recognized under File No. E83421

CSA Recoginized under File No. LR69703

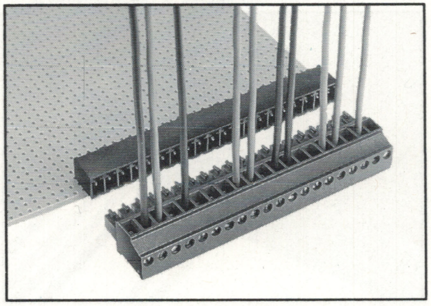
ELVP Mini-Right Angle Plug
ELVT Mini-Straight Plug

.150"

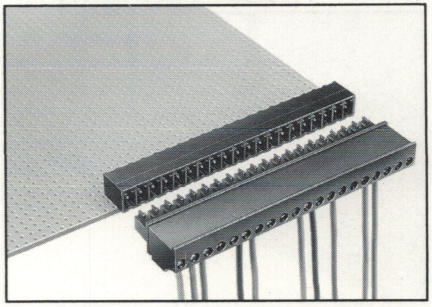
ELVP Right Angle

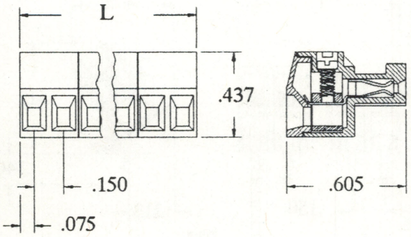


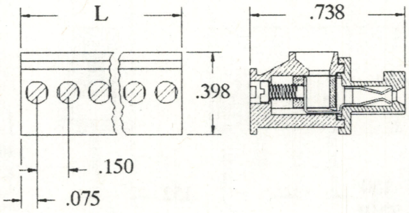
ELVT Top Entry

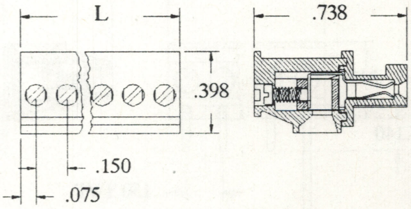


ELVT Bottom Entry









POS	CATALOG #	L INCHES
2	ELVP02100	.300
3	ELVP03100	.450
4	ELVP04100	.600
5	ELVP05100	.750
6	ELVP06100	.900
7	ELVP07100	1.050
8	ELVP08100	1.200
9	ELVP09100	1.350
10	ELVP10100	1.500
11	ELVP11100	1.650
12	ELVP12100	1.800
13	ELVP13100	1.950
14	ELVP14100	2.100
15	ELVP15100	2.250
16	ELVP16100	2.400
17	ELVP17100	2.550
18	ELVP18100	2.700
19	ELVP19100	2.850
20	ELVP20100	3.000

POS	CATALOG #	L INCHES
2	ELVT02500	.300
3	ELVT03500	.450
4	ELVT04500	.600
5	ELVT05500	.750
6	ELVT06500	.900
7	ELVT07500	1.050
8	ELVT08500	1.200
9	ELVT09500	1.350
10	ELVT10500	1.500
11	ELVT11500	1.650
12	ELVT12500	1.800
13	ELVT13500	1.950
14	ELVT14500	2.100
15	ELVT15500	2.250
16	ELVT16500	2.400
17	ELVT17500	2.550
18	ELVT18500	2.700
19	ELVT19500	2.850
20	ELVT20500	3.000

POS	CATALOG #	L INCHES
2	ELVT02600	.300
3	ELVT03600	.450
4	ELVT04600	.600
5	ELVT05600	.750
6	ELVT06600	.900
7	ELVT07600	1.050
8	ELVT08600	1.200
9	ELVT09600	1.350
10	ELVT10600	1.500
11	ELVT11600	1.650
12	ELVT12600	1.800
13	ELVT13600	1.950
14	ELVT14600	2.100
15	ELVT15600	2.250
16	ELVT16600	2.400
17	ELVT17600	2.550
18	ELVT18600	2.700
19	ELVT19600	2.850
20	ELVT20600	3.000

SPECIFICATIONS

Max. Operating Temp.: 125° C
Dielectric Withstanding: 1600 V
Current Rating: 12 A
Operating Voltage: 300 VAC RMS @ 60 Hz
Insulation Resistance: 1000 mΩ
Wire Range: #16-28 AWG
Wire Pullout Force: UL486E Section 14

MATERIALS

Housing: Polyamide, black, UL94V-0, (green optional)
Contact: Beryllium copper
Plating: Tin-lead
Hardware: Brass, nickel plated

INSTALLATION

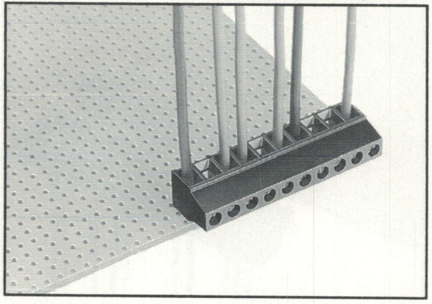
Wire Strip Length: 0.25"
Tightening Torque: 0.25 Nm

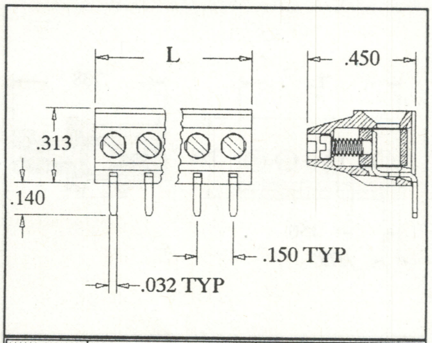
APPROVALS:

UL Recognized under File No. E83421
CSA Recognized under File No. LR69703

ELVM Fixed Terminal Block
Vertical – Horizontal – Angled .150"

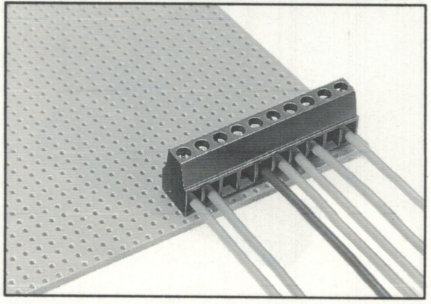
ELVM Vertical Wire Entry

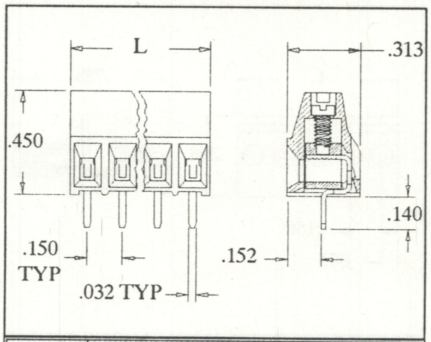




POS	CATALOG #	L INCHES
2	ELVM02900	.300
3	ELVM03900	.450
4	ELVM04900	.600
5	ELVM05900	.750
6	ELVM06900	.900
7	ELVM07900	1.050
8	ELVM08900	1.200
9	ELVM09900	1.350
10	ELVM10900	1.500

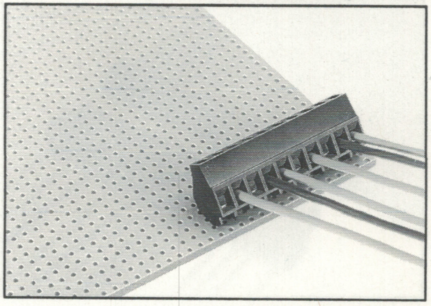
ELVM Horizontal Wire Entry

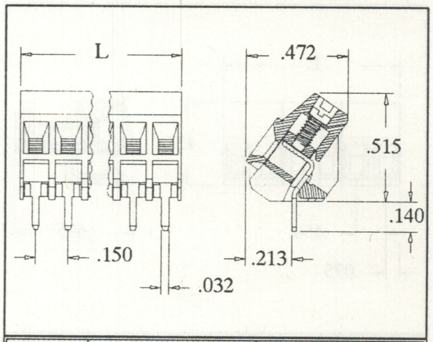




POS	CATALOG #	L INCHES
2	ELVM02100	.300
3	ELVM03100	.450
4	ELVM04100	.600
5	ELVM05100	.750
6	ELVM06100	.900
7	ELVM07100	1.050
8	ELVM08100	1.200
9	ELVM09100	1.350
10	ELVM10100	1.500

ELVM Angled Wire Entry





POS	CATALOG #	L INCHES
2	ELVM02300	.300
3	ELVM03300	.450
4	ELVM04300	.600
5	ELVM05300	.750
6	ELVM06300	.900
7	ELVM07300	1.050
8	ELVM08300	1.200
9	ELVM09300	1.350
10	ELVM10300	1.500

SPECIFICATIONS

Max. Operating Temp.: 125° C
Dielectric Withstanding: 1600 V
Current Rating: 12 A
Operating Voltage: 300 VAC RMS @ 60 Hz
Insulation Resistance: 1000 mΩ
Wire Range: #16-28 AWG
Wire Pullout Force: UL486E Section 14

MATERIALS

Housing: Polyamide, black, UL94V-0, (green optional)
Contact: Copper alloy
Plating: Tin-lead
Hardware: Brass, nickel plated

INSTALLATION

Wire Strip Length: 0.25"
Tightening Torque: 0.25Nm
Hole Diameter: .047"

APPROVALS:

UL Recognized under File No. E83421

CSA Recognized under File No. LR69703

ELV Accessories and Variations .150"

ELV Options

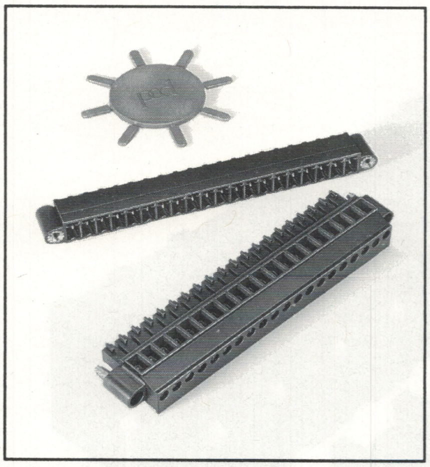
Optional accessories and variations, as detailed below, greatly expand the application range and flexibility of the ELV line. Please see the table below for assistance in part numbering, and contact PCD for additional details or application guidance.

Gold Plated Contacts

ELV plugs and headers are available with selectively gold plated contacts - .000030" gold over .000050" nickel - for critical applications involving low level circuits or more severe operating conditions.

Locking Ears

Integrally molded locking ears are available with all ELV plugs and ELVH header configurations for use in high stress or high vibration applications, or where unintentional disconnect must be prevented. The integrally molded PCD ears provide a more secure alternate to "snap-on" versions.



Plug ears capture a floating, slot-head locking screw which engages a threaded insert on the header ear. The mounting screw is tightened after plug and header are mated, firmly securing the connection.

Mounting Ears

Header locking ears, complete with threaded inserts, can also be utilized as mounting ears to secure headers to printed boards (vertical mount) or bulkheads. Alternatively, headers or plugs can be provided with integral mounting ears which feature the same external dimensions as the locking ears, and in-line or perpendicular through-holes for mounting purposes. Contact PCD for details.

Keying

PCD ELV headers are designed to accept tabs which lock into keyways in the molded plastic, and can be configured to ensure correct mating of physically similar but electrically unique connector elements.

The bright yellow tabs provide a visual and physical confirmation of correct mating. For handling convenience, the ELVKEY100 keys are supplied in rings of eight.

In order to key a mated pair of connectors, the header is configured with the appropriate combination of keys, and the ELV plug is modified by trimming off the plastic tabs on the corresponding keyed contact pins.

Green Color Available

Standard PCD product color is black. However, ELV products shown on pages 4-6 are also available - with PCD Express delivery - in green, if compatibility with blocks previously installed on a system is required.

Marking

ELV plugs are available with a variety of standard and special hot stamp markings. Please contact PCD regarding header marking, or to discuss requirements for special plug or header marking.

Special Variations

In addition to the standard ELV product variations indicated in this catalog, PCD is a leading supplier of special block configurations and modifications, tailored to meet unusual system design requirements, solve unusual problems, or provide unique product identification or capability.

ELV PART NUMBERING GUIDE

PLATING, MOUNTING AND MARKING VARIATIONS

ELV X XX X X X

Add "E" as 10th digit to indicate locking/mounting ears

TYPE
H = Header
P = Plug
T = Straight Plug
M = Board Mount

SIZE
(Number of positions)

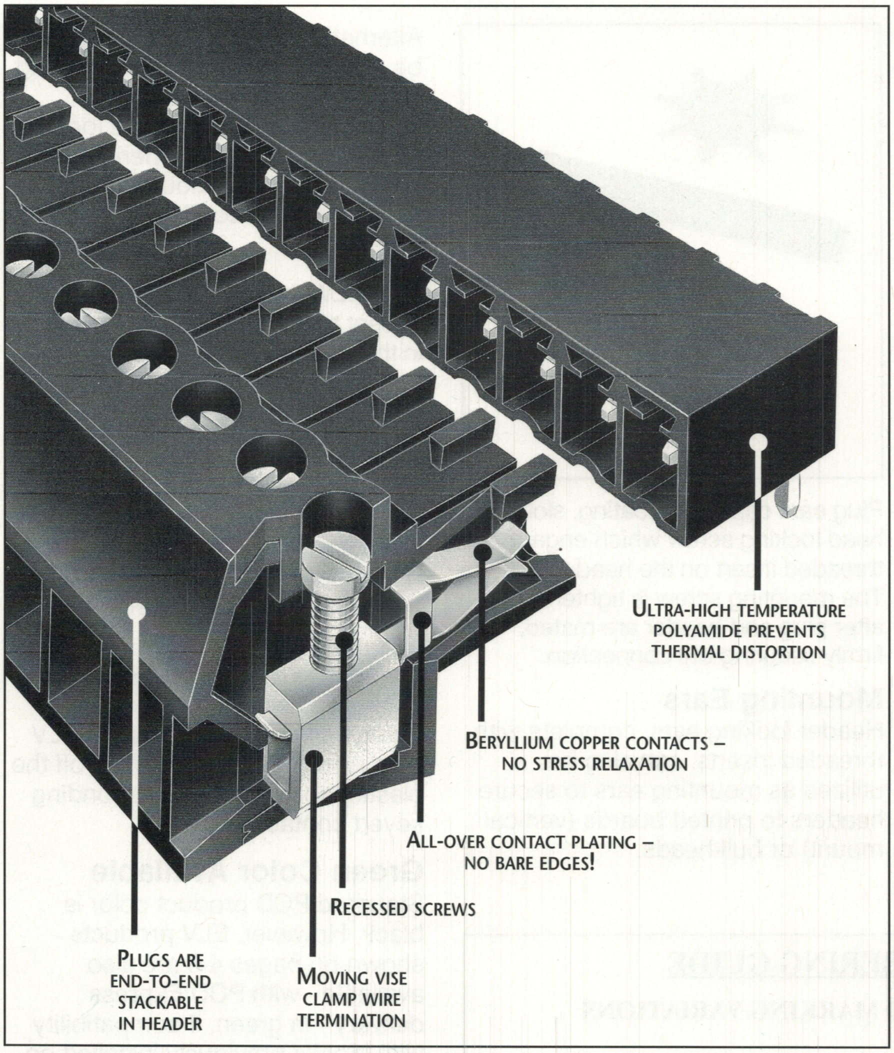
STYLE
(See appropriate page)

PLATING/COLOR
0 = Tin-lead/black
1 = Gold/black
G = Tin-lead/green
2 = Gold/green

MARKING
0 = Standard
A = Right-to-Left
M = Left-To-Right
V = Top-to-Bottom
Sn = Special

Contact PCD for specification details.

ELX Terminal Block System 3.5mm


Ultra-high temperature polyamide prevents thermal distortion
Beryllium copper contacts – no stress relaxation
All-over contact plating – no bare edges!
Recessed screws
Plugs are end-to-end stackable in header
Moving vise clamp wire termination

The PCD ELX line is a new family of high density, high temperature pluggable and fixed terminal blocks on 3.5mm centers, featuring moving vise clamp wire terminations, between-contact keying capability and many optional mounting and application features.

The ELX line is intermateable and interchangeable with 3.5mm competitive imports, but offers significant differences and advantages in material, design details and service as indicated on the drawing on this page and itemized at right.

Contact Material

PCD plug contacts are beryllium copper, selected to eliminate stress relaxation problems, and offer significantly higher normal force after repeated insertions and withdrawals than competitive phosphor bronze equivalents.

Contact Plating

ELX plug contacts are electro-tin plated after blanking and forming, guaranteeing no bare edges on the critical contact mating area. This offers distinct advantages over contacts manufactured from pre-plated stock, which can have bare edges susceptible to corrosion.

Current Rating

Because of superior contact element design and material selection, the PCD ELX line has been given a 12A UL current rating — the highest in the industry. ELX terminal blocks will run cooler — a critical basis for reliable, long term performance.

Plug Stacking

PCD plugs can be stacked side-by-side in PCD headers without losing a contact position. For example, two 6-position plugs are stackable in a 12-position header. Another PCD innovation!

Insulation Material

ELX headers — and plugs — are molded of ultra-high temperature glass-filled resin. This material offers a deflection temperature to 480°F which is far higher than the lower temperature resins used in competitive connectors.

Accessories and Variations

A broad selection of plug and header variations and accessories is readily available from PCD to increase the application flexibility of the ELX line. These are outined below. See page 12 for details.

- ***Green color***
- ***Gold plated contacts***
- ***Locking ears***
- ***Mounting ears***
- ***Keying***
- ***Marking***

ELXH Mini-Headers
Vertical and Horizontal 3.5mm

PRODUCT DESCRIPTIONS

• Plugs

ELXP pluggable terminal blocks feature wire entry parallel to contact and mate with ELXH headers or competitive headers.

ELXT pluggable terminal blocks feature wire entry perpendicular to contact - top or bottom entry is available - and mate with ELXH headers or competitive headers. Moving vise clamp wire termination permits a wide range of wires (28-16 AWG) to be terminated repeatedly without strand damage. Details of variations and accessories can be found on Page 12.

• Headers

ELXH headers, available in vertical and horizontal versions, are molded of an ultra-high temperature resin to prevent deformation during soldering. A shrouded design, along with the capability for keying, prevents mismating. ELXH headers mate with PCD and competitive pluggable terminal blocks. Multiple ELX plugs can be stacked end-to-end in a header without loss of contact position.

• Fixed Terminals

ELX fixed wire-to-board terminals are available in vertical, angled and horizontal wire entry versions.

The ELX family utilizes the moving vise clamp to terminate the wire range 28-16 AWG. The high temperature polyester housing is molded to size. All three versions are available in 2-10 positions. For marking details, see Page 12.

SPECIFICATIONS:

Maximum Operating Temperature: 125° C

Dielectric Withstanding: 1600 V

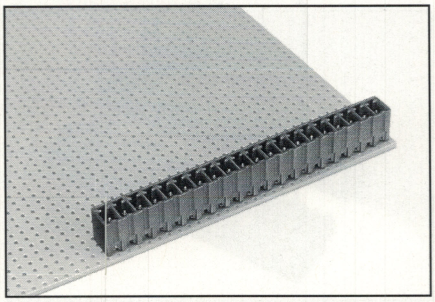
Current Rating: 12 A

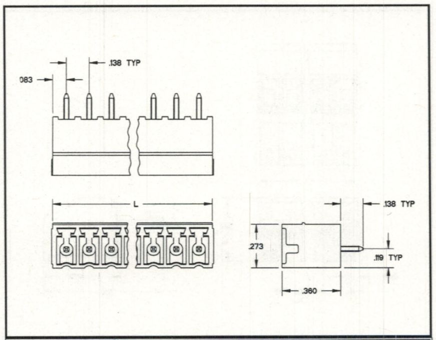
Operating Voltage: 300 VAC RMS @60 Hz

Insulation Resistance: 1000 mΩ

Wire Pullout Force: Per UL486E Section 14

ELXH Vertical





POS	CATALOG #	L INCHES
2	ELXH02500	.304
3	ELXH03500	.442
4	ELXH04500	.580
5	ELXH05500	.718
6	ELXH06500	.856
7	ELXH07500	.994
8	ELXH08500	1.132
9	ELXH09500	1.270
10	ELXH10500	1.408
11	ELXH11500	1.546
12	ELXH12500	1.684
13	ELXH13500	1.822
14	ELXH14500	1.960
15	ELXH15500	2.098
16	ELXH16500	2.236
17	ELXH17500	2.374
18	ELXH18500	2.512
19	ELXH19500	2.650
20	ELXH20500	2.788

MATERIALS:

Housing: Polyamide, black, UL94V-0 (green optional)

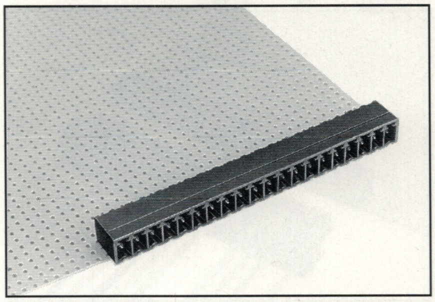
Contact: Copper alloy

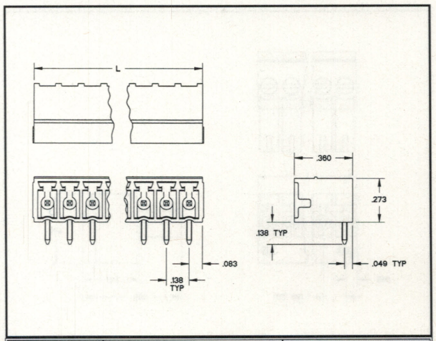
Plating: Tin-lead

INSTALLATION

Hole Diameter: .047"

ELXH Horizontal





POS	CATALOG #	L INCHES
2	ELXH02100	.304
3	ELXH03100	.442
4	ELXH04100	.580
5	ELXH05100	.718
6	ELXH06100	.856
7	ELXH07100	.994
8	ELXH08100	1.132
9	ELXH09100	1.270
10	ELXH10100	1.408
11	ELXH11100	1.546
12	ELXH12100	1.684
13	ELXH13100	1.822
14	ELXH14100	1.960
15	ELXH15100	2.098
16	ELXH16100	2.236
17	ELXH17100	2.374
18	ELXH18100	2.512
19	ELXH19100	2.650
20	ELXH20100	2.788

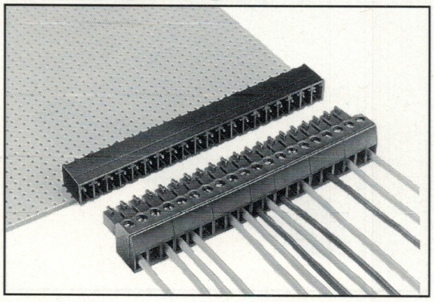
APPROVALS:

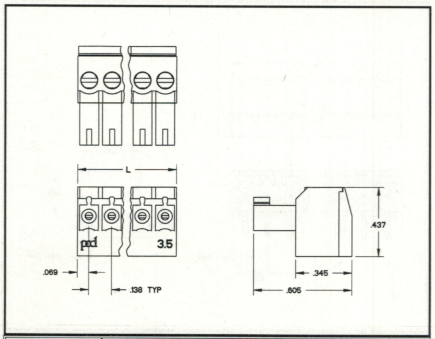
UL Recognized under File No. E83421

CSA Recoginized under File No. LR69703

ELXP Mini-Right Angle Plug
ELXT Mini-Straight Plug 3.5mm

ELXP Right Angle



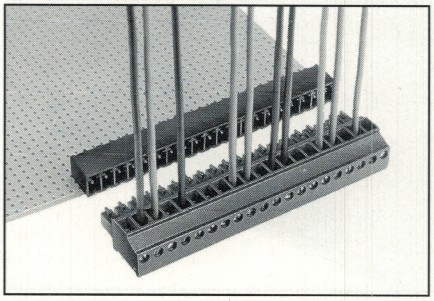


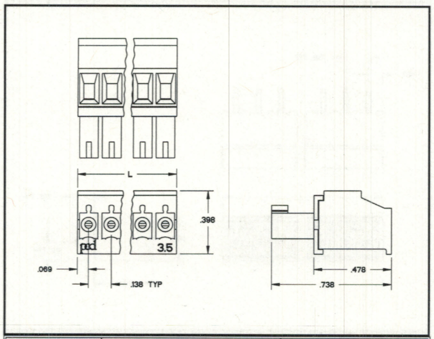
POS	CATALOG #	L INCHES
2	ELXP02100	.276
3	ELXP03100	.414
4	ELXP04100	.552
5	ELXP05100	.690
6	ELXP06100	.828
7	ELXP07100	.966
8	ELXP08100	1.104
9	ELXP09100	1.242
10	ELXP10100	1.380
11	ELXP11100	1.518
12	ELXP12100	1.656
13	ELXP13100	1.794
14	ELXP14100	1.932
15	ELXP15100	2.070
16	ELXP16100	2.208
17	ELXP17100	2.346
18	ELXP18100	2.484
19	ELXP19100	2.622
20	ELXP20100	2.760

SPECIFICATIONS:

Maximum Operating Temperature: 125° C
Dielectric Withstanding: 1600 V
Current Rating: 12 A
Operating Voltage: 300 VAC RMS @60 Hz
Insulation Resistance: 1000 mΩ
Wire Range: #16-28 AWG
Wire Pullout Force: Per UL486E Section 14

ELXT Top Entry





POS	CATALOG #	L INCHES
2	ELXT02500	.276
3	ELXT03500	.414
4	ELXT04500	.552
5	ELXT05500	.690
6	ELXT06500	.828
7	ELXT07500	.966
8	ELXT08500	1.104
9	ELXT09500	1.242
10	ELXT10500	1.380
11	ELXT11500	1.518
12	ELXT12500	1.656
13	ELXT13500	1.794
14	ELXT14500	1.932
15	ELXT15500	2.070
16	ELXT16500	2.208
17	ELXT17500	2.346
18	ELXT18500	2.484
19	ELXT19500	2.622
20	ELXT20500	2.760

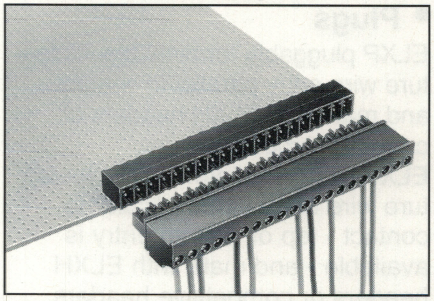
MATERIALS:

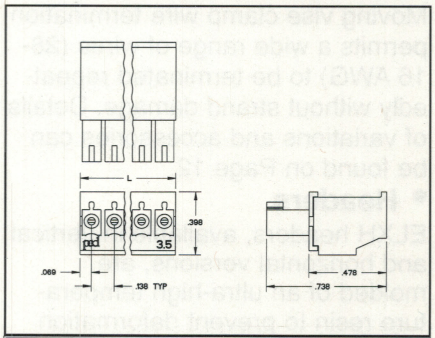
Housing: Polyamide, black, UL94V-0 (green optional)
Contact: Beryllium copper
Plating: Tin-lead
Hardware: Brass, nickel plated

INSTALLATION

Wire Strip Length: 0.25"
Tightening Torque: 0.25 Nm

ELXT Bottom Entry





POS	CATALOG #	L INCHES
2	ELXT02600	.276
3	ELXT03600	.414
4	ELXT04600	.552
5	ELXT05600	.690
6	ELXT06600	.828
7	ELXT07600	.966
8	ELXT08600	1.104
9	ELXT09600	1.242
10	ELXT10600	1.380
11	ELXT11600	1.518
12	ELXT12600	1.656
13	ELXT13600	1.794
14	ELXT14600	1.932
15	ELXT15600	2.070
16	ELXT16600	2.208
17	ELXT17600	2.346
18	ELXT18600	2.484
19	ELXT19600	2.622
20	ELXT20600	2.760

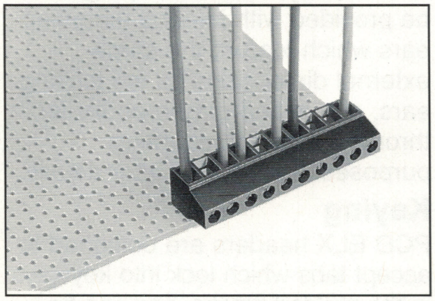
APPROVALS:

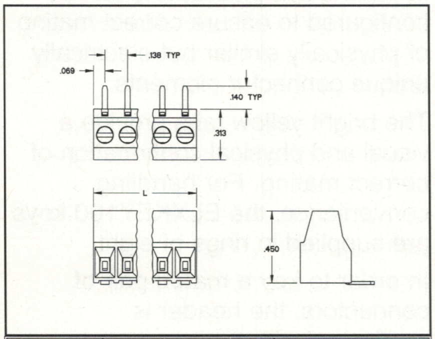
UL Recognized under File No. E83421

CSA Recogingized under File No. LR69703

ELXM Fixed Terminal Block
Vertical – Horizontal – Angled 3.5mm

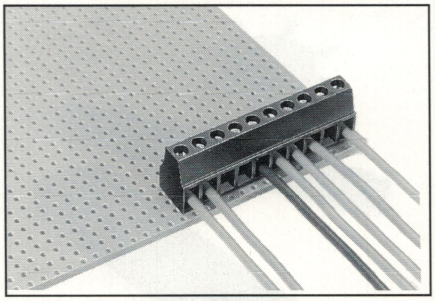
ELXM Vertical Wire Entry

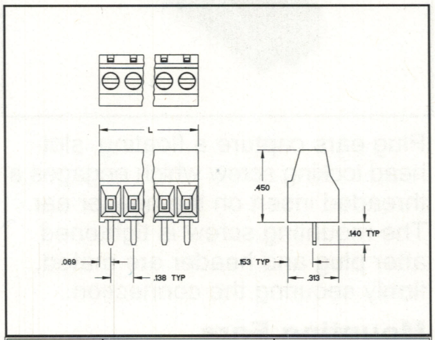




POS	CATALOG #	L INCHES
2	ELXM02900	.276
3	ELXM03900	.414
4	ELXM04900	.552
5	ELXM05900	.690
6	ELXM06900	.828
7	ELXM07900	.966
8	ELXM08900	1.104
9	ELXM09900	1.242
10	ELXM10900	1.380

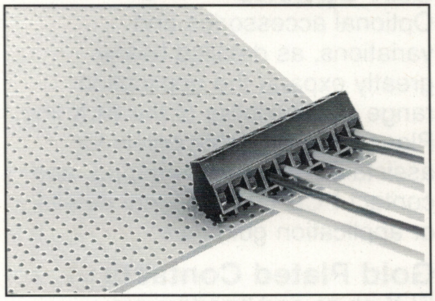
ELXM Horizontal Wire Entry

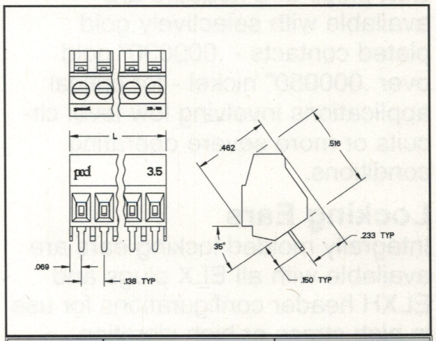




POS	CATALOG #	L INCHES
2	ELXM02100	.276
3	ELXM03100	.414
4	ELXM04100	.552
5	ELXM05100	.690
6	ELXM06100	.828
7	ELXM07100	.966
8	ELXM08100	1.104
9	ELXM09100	1.242
10	ELXM10100	1.380

ELXM Angled Wire Entry





POS	CATALOG #	L INCHES
2	ELXM02300	.276
3	ELXM03300	.414
4	ELXM04300	.552
5	ELXM05300	.690
6	ELXM06300	.828
7	ELXM07300	.966
8	ELXM08300	1.104
9	ELXM09300	1.242
10	ELXM10300	1.380

SPECIFICATIONS:

Maximum Operating Temperature: 125° C
Dielectric Withstanding: 1600 V
Current Rating: 12 A
Operating Voltage: 300 VAC RMS @60 Hz
Insulation Resistance: 1000 mΩ
Wire Range: #16-28 AWG
Wire Pullout Force: Per UL486E Section 14

MATERIALS:

Housing: Polyamide, black, UL94V-0 (green optional)
Contact: Copper alloy
Plating: Tin-lead
Hardware: Brass, nickel plated

INSTALLATION

Wire Strip Length: 0.25”
Tightening Torque: 0.25 Nm
Hole Diameter: 0.47”

APPROVALS:

UL Recognized under File No. E83421

CSA Recoginized under File No. LR69703

pcd ELX Accessories and Variations 3.5mm

ELX Options

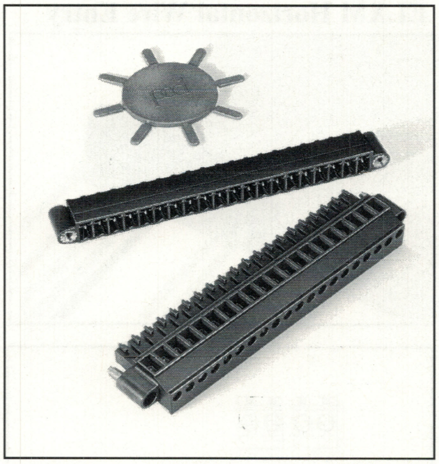
Optional accessories and variations, as detailed below, greatly expand the application range and flexibility of the ELX line. Please see the table below for assistance in part numbering, and contact PCD for additional details or application guidance.

Gold Plated Contacts

ELX plugs and headers are available with selectively gold plated contacts - .000030" gold over .000050" nickel - for critical applications involving low level circuits or more severe operating conditions.

Locking Ears

Integrally molded locking ears are available with all ELX plugs and ELXH header configurations for use in high stress or high vibration applications, or where unintentional disconnect must be prevented. The integrally molded PCD ears provide a more secure alternate to "snap-on" versions.



Plug ears capture a floating, slot-head locking screw which engages a threaded insert on the header ear. The mounting screw is tightened after plug and header are mated, firmly securing the connection.

Mounting Ears

Header locking ears, complete with threaded inserts, can also be utilized as mounting ears to secure headers to printed boards (vertical mount) or bulkheads.

ELX PART NUMBERING GUIDE

PLATING, MOUNTING AND MARKING VARIATIONS

ELX X XX X X X

TYPE

H = Header
P = Plug
T = Straight Plug
M = Board Mount

SIZE
(Number of positions)

STYLE
(See appropriate page)

PLATING/COLOR

0 = Tin-lead/black
1 = Gold/black
G = Tin-lead/green
2 = Gold/green

Add "E" as 10th digit to indicate locking/mounting ears

MARKING

0 = Standard
A = Right-to-Left
M = Left-To-Right
V = Top-to-Bottom
Sn = Special

Contact PCD for specification details.

Alternatively, headers or plugs can be provided with integral mounting ears which feature the same external dimensions as the locking ears, and in-line or perpendicular through-holes for mounting purposes. Contact PCD for details.

Keying

PCD ELX headers are designed to accept tabs which lock into keyways in the molded plastic, and can be configured to ensure correct mating of physically similar but electrically unique connector elements.

The bright yellow tabs provide a visual and physical confirmation of correct mating. For handling convenience, the ELXKEY100 keys are supplied in rings of eight.

In order to key a mated pair of connectors, the header is configured with the appropriate combination of keys, and the ELX plug is modified by trimming off the plastic tabs on the corresponding keyed contact pins.

Green Color Available

Standard PCD product color is black. However, ELX products shown on pages 8 -11 are also available - with PCD Express delivery - in green, if compatibility with blocks previously installed on a system is required.

Marking

ELX plugs are available with a variety of standard and special hot stamp markings. Please contact PCD regarding header marking, or to discuss requirements for special plug or header marking.

Special Variations

In addition to the standard ELX product variations indicated in this catalog, PCD is a leading supplier of special block configurations and modifications, tailored to meet unusual system design requirements, solve unusual problems, or provide unique product identification or capability.

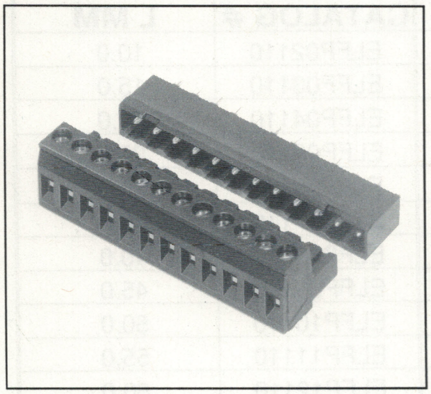
pcd ELF Pluggable Terminal Block System

The PCD ELF line comprises a family of durable, high temperature pluggable terminal blocks and headers, which provide flexible wire-to-board interconnect solutions for a wide variety of industrial and measurement applications.

ELF design and materials include numerous improvements and advantages which combine to make this the finest and most advanced pluggable terminal block line available.

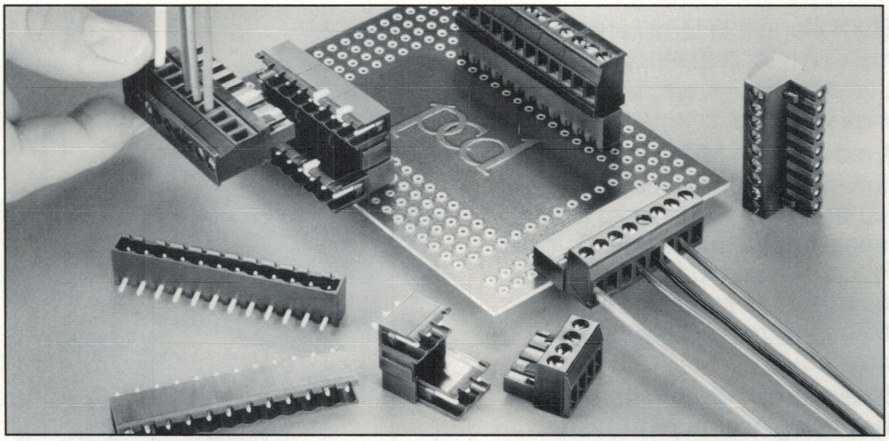
Smooth Mating/Unmating

Stable materials, precision molding, and a dual beam contact design based on PCD's many years of electronic connector expertise provide for smooth ELF mating action and reduce the unmating force, allowing connectors to be separated without abnormal force and possible header or wire bundle damage.



High Performance Material

ELFH series headers are molded from tough, stable PBT, providing additional strength and greater reliability under extreme conditions. The use of PBT eliminates problems of header deformation under high soldering temperatures and contributes to trouble-free mating and unmating.



Improved Wire Clamp Design

For high reliability wire termination, PCD's moving vise clamp ensures direct, high-pressure interconnection between contact and wire. When the wire is inserted, a rotating captive screw raises the vise clamp to guarantee a firm connection. The rotating element does not contact the wire, eliminating possible strand damage.

Green Color Available

Standard PCD product color is black. However, ELF products shown on pages 13-29 are also available - with PCD Express delivery - in green if compatability with blocks previously installed on a system is required. See pages 28-29.

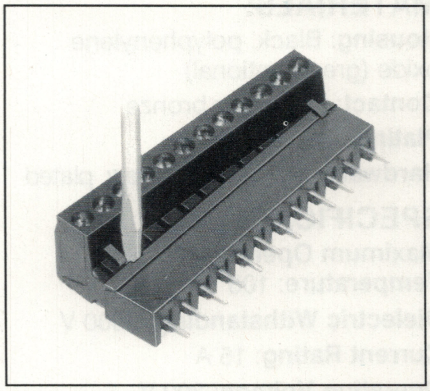
Accessories and Variations

A broad selection of plug and header variations and accessories is readily available from PCD to increase the application flexibility of the ELF line. These are outlined below. See pages 28-29 for details.

- **Gold plated contacts**
- **Locking ears**
- **Mounting ears**
- **Keying tabs**
- **Marking**

Interconnection Variety

Plugs and headers are available in 2 through 24 positions, and in both 5.0 mm and .200" spacing. Headers are available in both vertical and horizontal configurations, and with both closed shrouds and open sides.



Screwdriver Separation

Additional separation ease and safety are provided by molded-in U-shaped slots on the face of the header. Just slip in a screwdriver, turn it 90°, and the connector is opened. This feature is particularly important when working with larger connector sizes.

Wiring While Engaged

PCD's precision molding and component fabrication permit wires to be inserted and removed from individual contact positions while the connectors are mated, without possibility of damage.

ELFP Pluggable Terminal Block
Right Angle Plug

.200"/5.0 mm

ELFP pluggable terminal blocks mate with PCD ELFH headers. Universal design also mates with a wide variety of competitive headers.

A moving vise clamp wire termination permits a wide range of wires (up to #12 AWG) to be terminated repeatedly without strand damage. Precision-molded housings allow the user to terminate wires while the connector is plugged or unplugged.

Screwdriver slots at both ends of the mating header provide for simple, trouble-free unplugging and eliminate the possibility of contact damage.

Variations and accessories include gold plated contacts, locking ears, mounting ears, keying tabs, hot stamp marking and marking labels. Details are on pages 28-29.

MATERIALS:

Housing: Black, polyphenylene oxide (green optional)

Contact: Phosphor bronze

Plating: Electrolytic tin

Hardware: #4-40 steel screw, plated

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 3000 V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: AWG #12 stranded, #14-26 stranded and solid

Wire Pullout Force: Meets UL 486

INSTALLATION:

Wire Strip Length: .250"

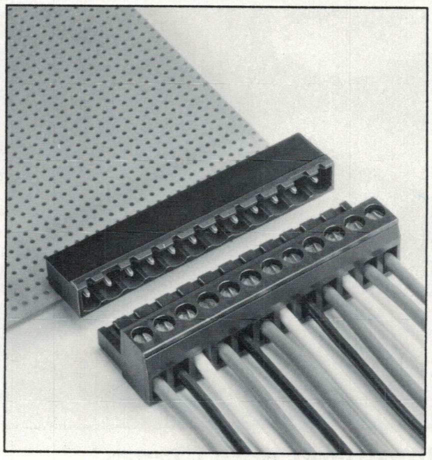
Tightening Torque: 7 in-lbs.

APPROVALS:

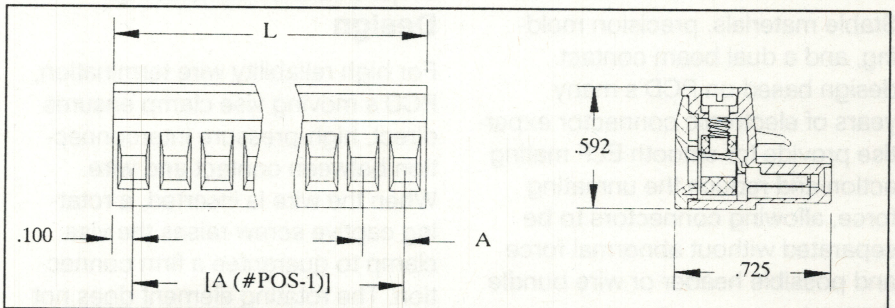
UL recognized under File No. E83421

CSA recognized under File No. LR69703-2

Meets **VDE** 0627 per **TUV** license No. BL 94 05 20396 001



- **MOVING VISE CLAMP WIRE TERMINATION**
- **MATES WITH PCD AND OTHER PIN HEADERS**
- **.200" AND 5.0 MM CENTERS**
- **2 TO 24 POSITIONS**



POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM
2	ELFP02210	.40	ELFP02110	10.0
3	ELFP03210	.60	ELFP03110	15.0
4	ELFP04210	.80	ELFP04110	20.0
5	ELFP05210	1.00	ELFP05110	25.0
6	ELFP06210	1.20	ELFP06110	30.0
7	ELFP07210	1.40	ELFP07110	35.0
8	ELFP08210	1.60	ELFP08110	40.0
9	ELFP09210	1.80	ELFP09110	45.0
10	ELFP10210	2.00	ELFP10110	50.0
11	ELFP11210	2.20	ELFP11110	55.0
12	ELFP12210	2.40	ELFP12110	60.0
13	ELFP13210	2.60	ELFP13110	65.0
14	ELFP14210	2.80	ELFP14110	70.0
15	ELFP15210	3.00	ELFP15110	75.0
16	ELFP16210	3.20	ELFP16110	80.0
17	ELFP17210	3.40	ELFP17110	85.0
18	ELFP18210	3.60	ELFP18110	90.0
19	ELFP19210	3.80	ELFP19110	95.0
20	ELFP20210	4.00	ELFP20110	100.0
21	ELFP21210	4.20	ELFP21110	105.0
22	ELFP22210	4.40	ELFP22110	110.0
23	ELFP23210	4.60	ELFP23110	115.0
24	ELFP24210	4.80	ELFP24110	120.0

ELFT Pluggable Terminal Block Straight Plug

Top Entry
.200"/5.0 mm

ELFT pluggable terminal blocks mates with PCD ELFH headers and a wide variety of competitive headers.

Straight plug design accepts wire entry from top or bottom. A moving vise clamp wire termination permits a wide range of wires (up to #12 AWG) to be terminated repeatedly without strand damage. Precision-molded housings allow wire termination while the connector is plugged or unplugged.

Variations and accessories include gold plated contacts, locking ears, mounting ears, keying tabs, hot stamp marking and marking labels. Details are on pages 28-29.

MATERIALS:

Housing: Black, polyphenylene oxide (green optional)

Contact: Phosphor bronze

Plating: Electrolytic tin

Hardware: #4-40 steel screw, plated

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 3000 V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: AWG #12 stranded, #14-26 stranded and solid

Wire Pullout Force: Meets UL 486

INSTALLATION:

Wire Strip Length: .310"

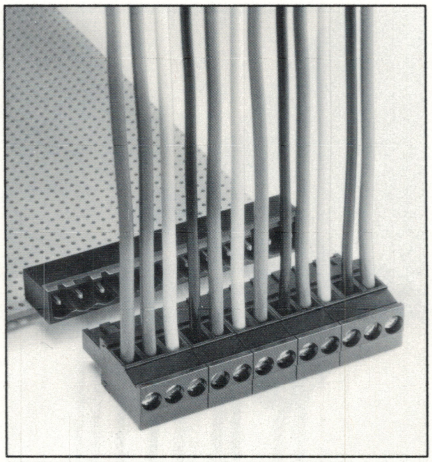
Tightening Torque: 7 in-lbs.

APPROVALS:

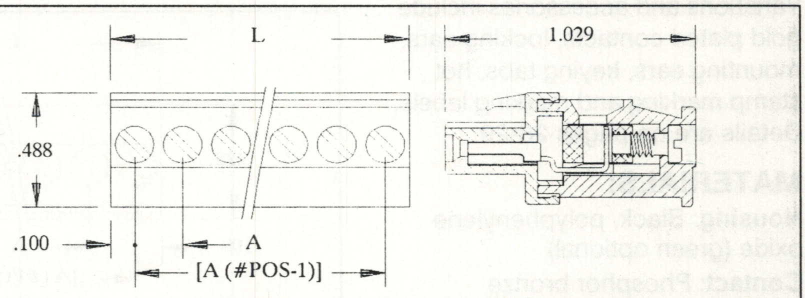
UL recognized under File No. E83421

CSA recognized under File No. LR69703-2

Meets **VDE** 0627 per **TUV** license No. BL 94 05 20396 001



- **MOVING VISE CLAMP WIRE TERMINATION**
- **MATES WITH PCD AND OTHER PIN HEADERS**
- **.200" AND 5.0 MM CENTERS**
- **2 TO 24 POSITIONS**



POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM
2	ELFT02250	.40	ELFT02150	10.0
3	ELFT03250	.60	ELFT03150	15.0
4	ELFT04250	.80	ELFT04150	20.0
5	ELFT05250	1.00	ELFT05150	25.0
6	ELFT06250	1.20	ELFT06150	30.0
7	ELFT07250	1.40	ELFT07150	35.0
8	ELFT08250	1.60	ELFT08150	40.0
9	ELFT09250	1.80	ELFT09150	45.0
10	ELFT10250	2.00	ELFT10150	50.0
11	ELFT11250	2.20	ELFT11150	55.0
12	ELFT12250	2.40	ELFT12150	60.0
13	ELFT13250	2.60	ELFT13150	65.0
14	ELFT14250	2.80	ELFT14150	70.0
15	ELFT15250	3.00	ELFT15150	75.0
16	ELFT16250	3.20	ELFT16150	80.0
17	ELFT17250	3.40	ELFT17150	85.0
18	ELFT18250	3.60	ELFT18150	90.0
19	ELFT19250	3.80	ELFT19150	95.0
20	ELFT20250	4.00	ELFT20150	100.0
21	ELFT21250	4.20	ELFT21150	105.0
22	ELFT22250	4.40	ELFT22150	110.0
23	ELFT23250	4.60	ELFT23150	115.0
24	ELFT24250	4.80	ELFT24150	120.0

ELFT Pluggable Terminal Block Straight Plug

Bottom Entry
.200"/5.0 mm

ELFT pluggable terminal blocks mates with PCD ELFH headers and a wide variety of competitive headers.

Straight plug design accepts wire entry from top or bottom. A moving vise clamp wire termination permits a wide range of wires (up to #12 AWG) to be terminated repeatedly without strand damage. Precision-molded housings allow wire termination while the connector is plugged or unplugged.

Variations and accessories include gold plated contacts, locking ears, mounting ears, keying tabs, hot stamp marking and marking labels. Details are on pages 28-29.

MATERIALS:

Housing: Black, polyphenylene oxide (green optional)
Contact: Phosphor bronze
Plating: Electrolytic tin
Hardware: #4-40 steel screw, plated

SPECIFICATIONS:

Maximum Operating Temperature: 105° C
Dielectric Withstanding: 3000 V
Current Rating: 15 A
Operating Voltage: 300 V
Insulation Resistance: 10^{11} ohms
Wire Range: AWG #12 stranded, #14-26 stranded and solid
Wire Pullout Force: Meets UL 486

INSTALLATION:

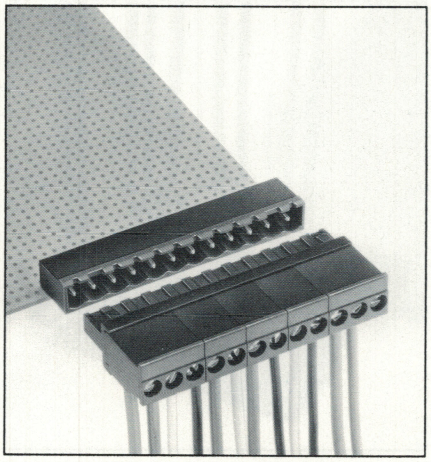
Wire Strip Length: .310"
Tightening Torque: 7 in-lbs.

APPROVALS:

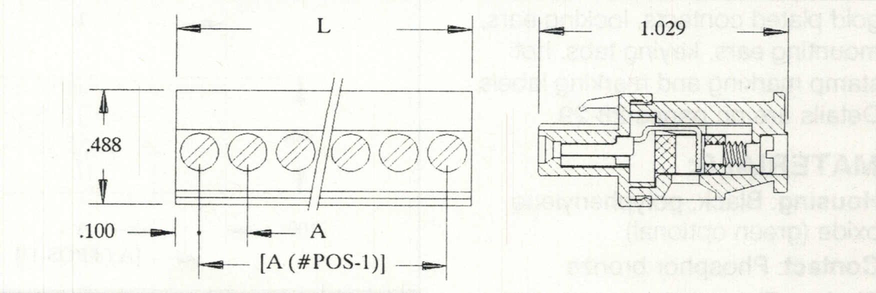
UL recognized under File No. E83421

CSA recognized under File No. LR69703-2

Meets **VDE** 0627 per **TUV** license No. BL 94 05 20396 001



- **MOVING VISE CLAMP WIRE TERMINATION**
- **MATES WITH PCD AND OTHER PIN HEADERS**
- **.200" AND 5.0 MM CENTERS**
- **2 TO 24 POSITIONS**



POS	.200" CENTERS (A) CATALOG #	L INCHES	5.0 MM CENTERS (A) CATALOG #	L MM
2	ELFT02260	.40	ELFT02160	10.0
3	ELFT03260	.60	ELFT03160	15.0
4	ELFT04260	.80	ELFT04160	20.0
5	ELFT05260	1.00	ELFT05160	25.0
6	ELFT06260	1.20	ELFT06160	30.0
7	ELFT07260	1.40	ELFT07160	35.0
8	ELFT08260	1.60	ELFT08160	40.0
9	ELFT09260	1.80	ELFT09160	45.0
10	ELFT10260	2.00	ELFT10160	50.0
11	ELFT11260	2.20	ELFT11160	55.0
12	ELFT12260	2.40	ELFT12160	60.0
13	ELFT13260	2.60	ELFT13160	65.0
14	ELFT14260	2.80	ELFT14160	70.0
15	ELFT15260	3.00	ELFT15160	75.0
16	ELFT16260	3.20	ELFT16160	80.0
17	ELFT17260	3.40	ELFT17160	85.0
18	ELFT18260	3.60	ELFT18160	90.0
19	ELFT19260	3.80	ELFT19160	95.0
20	ELFT20260	4.00	ELFT20160	100.0
21	ELFT21260	4.20	ELFT21160	105.0
22	ELFT22260	4.40	ELFT22160	110.0
23	ELFT23260	4.60	ELFT23160	115.0
24	ELFT24260	4.80	ELFT24160	120.0

ELFF Pluggable Terminal Block Front Wire Entry/Front Actuation

Top Entry .200"/5.0 mm

ELFF pluggable terminal blocks mate with PCD ELFH headers and a wide variety of competitive headers.

Easy-operation design allows both wire insertion and screw actuation from the front face of the connector, facilitating system packaging and connector installation. A moving vise clamp wire termination permits a wide range of wires (up to #12 AWG) to be terminated repeatedly without strand damage. Precision-molded housings allow wire termination while the connector is plugged or unplugged.

Variations and accessories include gold plated contacts, locking ears, mounting ears, keying tabs, hot stamp marking and marking labels. Details are on pages 28-29.

MATERIALS:

Housing: Black, polyphenylene oxide (green optional)

Contact: Phosphor bronze

Plating: Electrolytic tin

Hardware: #4-40 steel screw, plated

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 3000 V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: AWG #12 stranded, #14-26 stranded and solid

Wire Pullout Force: Meets UL 486

INSTALLATION:

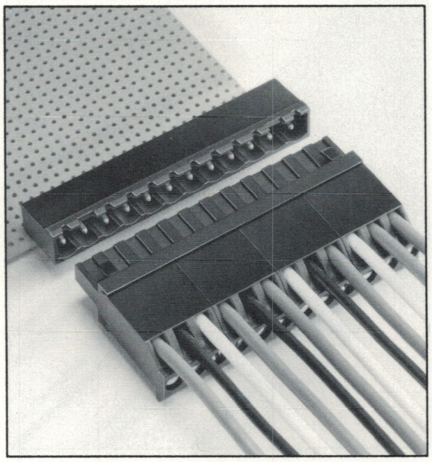
Wire Strip Length: .310"

Tightening Torque: 7 in-lbs.

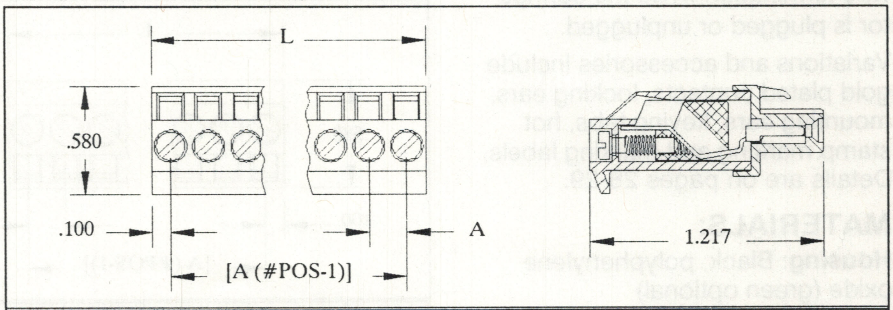
APPROVALS:

UL recognized under File No. E83421

Canadian Standards Association recognized under File No. LR69703-2



- **FRONT INSERTION/ ACTUATION FOR EASE OF OPERATION**
- **MOVING VISE CLAMP WIRE TERMINATION**
- **MATES WITH PCD AND OTHER PIN HEADERS**
- **.200" AND 5.0 MM**
- **2 TO 24 POSITIONS**



POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM
2	ELFF02230	.40	ELFF02130	10.0
3	ELFF03230	.60	ELFF03130	15.0
4	ELFF04230	.80	ELFF04130	20.0
5	ELFF05230	1.00	ELFF05130	25.0
6	ELFF06230	1.20	ELFF06130	30.0
7	ELFF07230	1.40	ELFF07130	35.0
8	ELFF08230	1.60	ELFF08130	40.0
9	ELFF09230	1.80	ELFF09130	45.0
10	ELFF10230	2.00	ELFF10130	50.0
11	ELFF11230	2.20	ELFF11130	55.0
12	ELFF12230	2.40	ELFF12130	60.0
13	ELFF13230	2.60	ELFF13130	65.0
14	ELFF14230	2.80	ELFF14130	70.0
15	ELFF15230	3.00	ELFF15130	75.0
16	ELFF16230	3.20	ELFF16130	80.0
17	ELFF17230	3.40	ELFF17130	85.0
18	ELFF18230	3.60	ELFF18130	90.0
19	ELFF19230	3.80	ELFF19130	95.0
20	ELFF20230	4.00	ELFF20130	100.0
21	ELFF21230	4.20	ELFF21130	105.0
22	ELFF22230	4.40	ELFF22130	110.0
23	ELFF23230	4.60	ELFF23130	115.0
24	ELFF24230	4.80	ELFF24130	120.0

ELFF Pluggable Terminal Block
Front Wire Entry/Front Actuation

Bottom Entry
.200"/5.0 mm

ELFF pluggable terminal blocks mate with PCD ELFH headers and a wide variety of competitive headers.

Easy-operation design allows both wire insertion and screw actuation from the front face of the connector, facilitating system packaging and connector installation. A moving vise clamp wire termination permits a wide range of wires (up to #12 AWG) to be terminated repeatedly without strand damage. Precision-molded housings allow wire termination while the connector is plugged or unplugged.

Variations and accessories include gold plated contacts, locking ears, mounting ears, keying tabs, hot stamp marking and marking labels. Details are on pages 28-29.

MATERIALS:

Housing: Black, polyphenylene oxide (green optional)

Contact: Phosphor bronze

Plating: Electrolytic tin

Hardware: #4-40 steel screw, plated

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 3000 V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: AWG #12 stranded, #14-26 stranded and solid

Wire Pullout Force: Meets UL 486

INSTALLATION:

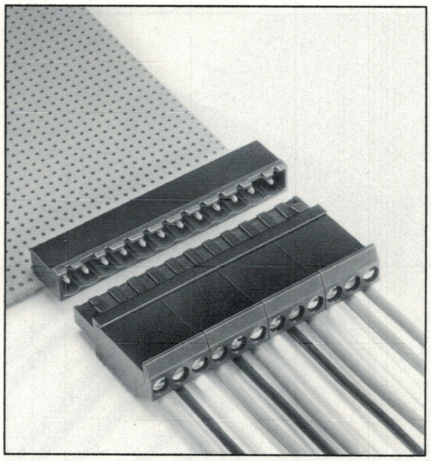
Wire Strip Length: .310"

Tightening Torque: 7 in-lbs.

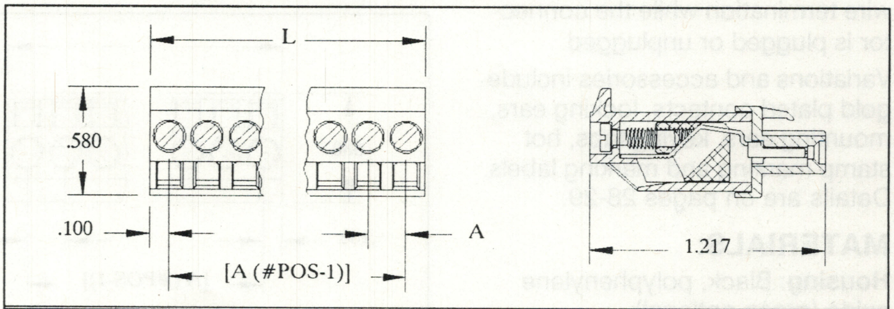
APPROVALS:

UL recognized under File No. E83421

Canadian Standards Association recognized under File No. LR69703-2



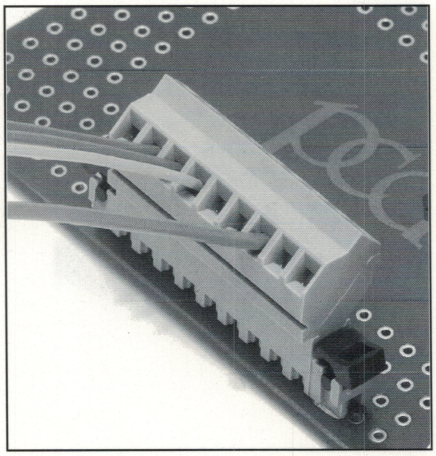
- **FRONT INSERTION/ ACTUATION FOR EASE OF OPERATION**
- **MOVING VISE CLAMP WIRE TERMINATION**
- **MATES WITH PCD AND OTHER PIN HEADERS**
- **.200" AND 5.0 MM**
- **2 TO 24 POSITIONS**



POS	.200" CENTERS (A) CATALOG #	L INCHES	5.0 MM CENTERS (A) CATALOG #	L MM
2	ELFF02240	.40	ELFF02140	10.0
3	ELFF03240	.60	ELFF03140	15.0
4	ELFF04240	.80	ELFF04140	20.0
5	ELFF05240	1.00	ELFF05140	25.0
6	ELFF06240	1.20	ELFF06140	30.0
7	ELFF07240	1.40	ELFF07140	35.0
8	ELFF08240	1.60	ELFF08140	40.0
9	ELFF09240	1.80	ELFF09140	45.0
10	ELFF10240	2.00	ELFF10140	50.0
11	ELFF11240	2.20	ELFF11140	55.0
12	ELFF12240	2.40	ELFF12140	60.0
13	ELFF13240	2.60	ELFF13140	65.0
14	ELFF14240	2.80	ELFF14140	70.0
15	ELFF15240	3.00	ELFF15140	75.0
16	ELFF16240	3.20	ELFF16140	80.0
17	ELFF17240	3.40	ELFF17140	85.0
18	ELFF18240	3.60	ELFF18140	90.0
19	ELFF19240	3.80	ELFF19140	95.0
20	ELFF20240	4.00	ELFF20140	100.0
21	ELFF21240	4.20	ELFF21140	105.0
22	ELFF22240	4.40	ELFF22140	110.0
23	ELFF23240	4.60	ELFF23140	115.0
24	ELFF24240	4.80	ELFF24140	120.0

ELFK 45° Pluggable Terminal Blocks .200”

New ELFK Series 45° pluggable terminal blocks improve wiring flexibility and access to wires and screws in applications where a high number of terminations are required in a minimum of space. Universal design ensures complete intermatability with both PCD ELFH Series and competitive headers. Precision-molded housings allow for termination of wires whether the connector is plugged or unplugged. Part numbers listed are for black. To order green, change the last character in the part number from 0 to G.



- **ACCEPTS #12 TO #26 AWG**
- **ANGLED WIRE AND SCREW ACCESS FOR TIGHT APPLICATIONS**
- **MOVING VISE CLAMP WIRE TERMINATION**

MATERIALS:

Contact: Phosphor bronze

Plating: Electrolytic tin (selective gold available)

Hardware: #4-40 steel screw, nickel plated

Housing: Black or green UL94V-0 thermoplastic

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 1600 V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: # 12-26 AWG stranded, # 14-26 AWG solid

Wire Pullout Force: Per UL486E

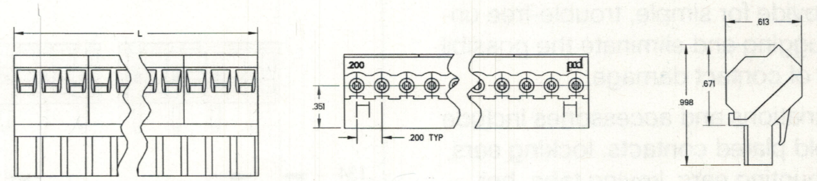
INSTALLATION:

Wire Strip Length: .250”

Tightening Torque: 7 in-lbs.

APPROVALS:

UL recognized, CSA approval pending.



POS	.200” CENTERS (A)	
	CATALOG #	L INCHES
2	ELFK02210	0.40
3	ELFK03210	0.60
4	ELFK04210	0.80
5	ELFK05210	1.00
6	ELFK06210	1.20
7	ELFK07210	1.40
8	ELFK08210	1.60
9	ELFK09210	1.80
10	ELFK10210	2.00
11	ELFK11210	2.20
12	ELFK12210	2.40
13	ELFK13210	2.60
14	ELFK14210	2.80
15	ELFK15210	3.00
16	ELFK16210	3.20
17	ELFK17210	3.40
18	ELFK18210	3.60
19	ELFK19210	3.80
20	ELFK20210	4.00
21	ELFK21210	4.20
22	ELFK22210	4.40
23	ELFK23210	4.60
24	ELFK24210	4.80

ELFH Horizontal Header - Closed .200"/5.0 mm

ELFH headers mate with PCD ELFP pluggable terminal blocks. Universal design also mates with a wide variety of competitive plugs.

Headers are molded of a high temperature polyester material, which provides much higher operating temperature capability than similar nylon or polypropylene connectors. This eliminates the possibility of connector damage or deformation caused by the heat of soldering.

Shrouded design protects pins and helps prevent cocking.

Screwdriver slots at header ends provide for simple, trouble-free unplugging and eliminate the possibility of contact damage.

Variations and accessories include gold plated contacts, locking ears, mounting ears, keying tabs, hot stamp marking and marking labels. Details are on pages 28-29.

MATERIALS:

Housing: Black polyester (green optional)
Contact: Copper alloy
Plating: Electrolytic tin

SPECIFICATIONS:

Maximum Operating Temperature: 105° C
Dielectric Withstanding: 3000 V
Current Rating: 15 A
Operating Voltage: 300 V
Insulation Resistance: 10^{11} ohms

INSTALLATION:

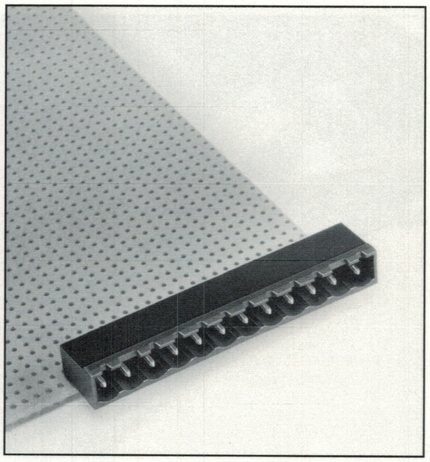
Hole Diameter: .055"

APPROVALS:

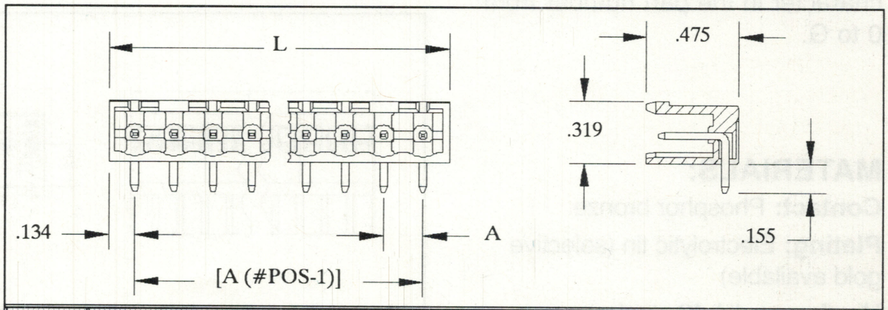
UL recognized under File No. E83421

CSA recognized under File No. LR69703-2

Meets **VDE** 0627 per **TUV** license No. BL 94 05 20396 001



- **HIGH TEMPERATURE POLYESTER**
- **END-TO-END STACKABLE**
- **SCREWDRIVER SLOT EASES UNPLUGGING**
- **MATES WITH PCD AND OTHER PLUGS**
- **2 TO 24 POSITIONS**



POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM
2	ELFH02210	.47	ELFH02110	11.75
3	ELFH03210	.67	ELFH03110	16.75
4	ELFH04210	.87	ELFH04110	21.75
5	ELFH05210	1.07	ELFH05110	26.75
6	ELFH06210	1.27	ELFH06110	31.75
7	ELFH07210	1.47	ELFH07110	36.75
8	ELFH08210	1.67	ELFH08110	41.75
9	ELFH09210	1.87	ELFH09110	46.75
10	ELFH10210	2.07	ELFH10110	51.75
11	ELFH11210	2.27	ELFH11110	56.75
12	ELFH12210	2.47	ELFH12110	61.75
13	ELFH13210	2.67	ELFH13110	66.75
14	ELFH14210	2.87	ELFH14110	71.75
15	ELFH15210	3.07	ELFH15110	76.75
16	ELFH16210	3.27	ELFH16110	81.75
17	ELFH17210	3.47	ELFH17110	86.75
18	ELFH18210	3.67	ELFH18110	91.75
19	ELFH19210	3.87	ELFH19110	96.75
20	ELFH20210	4.07	ELFH20110	101.75
21	ELFH21210	4.27	ELFH21110	106.75
22	ELFH22210	4.47	ELFH22110	111.75
23	ELFH23210	4.67	ELFH23110	116.75
24	ELFH24210	4.87	ELFH24110	121.75

ELFH Horizontal Header - Open .200"/5.0 mm

ELFH headers mate with PCD ELFP pluggable terminal blocks. Universal design also mates with a wide variety of competitive plugs.

Headers are molded of a high temperature polyester material, which provides much higher operating temperature capability than similar nylon or polypropylene connectors. This eliminates the possibility of connector damage or deformation caused by the heat of soldering.

Open-end design allows connectors to be stacked end-to-end while maintaining pin spacing.

Screwdriver slots at header ends provide for simple, trouble-free unplugging and eliminate the possibility of contact damage.

Variations and accessories include gold plated contacts, locking ears, mounting ears, keying tabs, hot stamp marking and marking labels. Details are on pages 28-29.

MATERIALS:

Housing: Black polyester (green optional)

Contact: Copper alloy

Plating: Electrolytic tin

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 3000 V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

INSTALLATION:

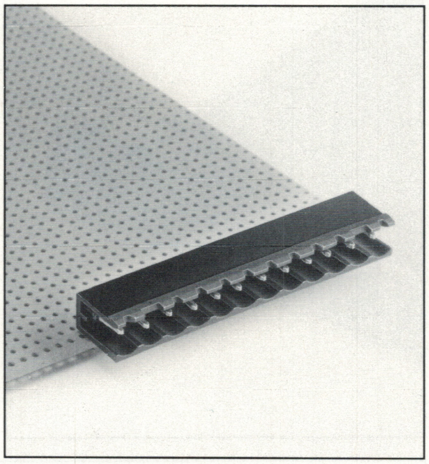
Hole Diameter: .055"

APPROVALS:

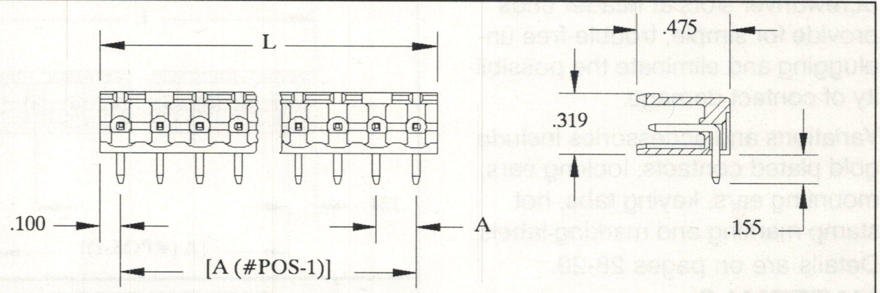
UL recognized under File No. E83421

CSA recognized under File No. LR69703-2

Meets **VDE** 0627 per **TUV** license No. BL 94 05 20396 001



- **HIGH TEMPERATURE POLYESTER**
- **END-TO-END STACKABLE**
- **SCREWDRIVER SLOT EASES UNPLUGGING**
- **MATES WITH PCD AND OTHER PLUGS**
- **2 TO 24 POSITIONS**



POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM
2	ELFH02220	.40	ELFH02120	10.0
3	ELFH03220	.60	ELFH03120	15.0
4	ELFH04220	.80	ELFH04120	20.0
5	ELFH05220	1.00	ELFH05120	25.0
6	ELFH06220	1.20	ELFH06120	30.0
7	ELFH07220	1.40	ELFH07120	35.0
8	ELFH08220	1.60	ELFH08120	40.0
9	ELFH09220	1.80	ELFH09120	45.0
10	ELFH10220	2.00	ELFH10120	50.0
11	ELFH11220	2.20	ELFH11120	55.0
12	ELFH12220	2.40	ELFH12120	60.0
13	ELFH13220	2.60	ELFH13120	65.0
14	ELFH14220	2.80	ELFH14120	70.0
15	ELFH15220	3.00	ELFH15120	75.0
16	ELFH16220	3.20	ELFH16120	80.0
17	ELFH17220	3.40	ELFH17120	85.0
18	ELFH18220	3.60	ELFH18120	90.0
19	ELFH19220	3.80	ELFH19120	95.0
20	ELFH20220	4.00	ELFH20120	100.0
21	ELFH21220	4.20	ELFH21120	105.0
22	ELFH22220	4.40	ELFH22120	110.0
23	ELFH23220	4.60	ELFH23120	115.0
24	ELFH24220	4.80	ELFH24120	120.0

ELFH Vertical Header - Closed .200"/5.0 mm

ELFH headers mate with PCD ELFP pluggable terminal blocks. Universal design also mates with a wide variety of competitive plugs.

Headers are molded of a high temperature polyester material, which provides much higher operating temperature capability than similar nylon or polypropylene connectors. This eliminates the possibility of connector damage or deformation caused by the heat of soldering.

Shrouded design protects pins and helps prevent cocking.

Screwdriver slots at header ends provide for simple, trouble-free unplugging and eliminate the possibility of contact damage.

Variations and accessories include gold plated contacts, locking ears, mounting ears, keying tabs, hot stamp marking and marking labels. Details are on pages 28-29.

MATERIALS:

Housing: Black polyester
(green optional)

Contact: Copper alloy

Plating: Electrolytic tin

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 3000 V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

INSTALLATION:

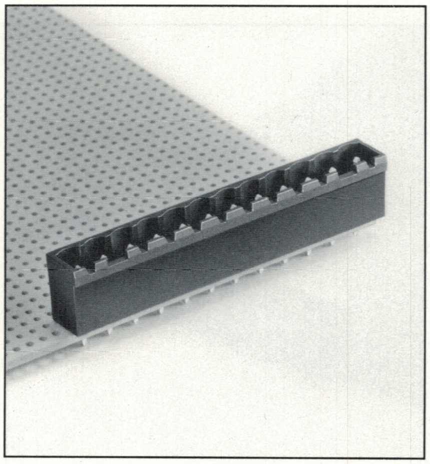
Hole Diameter: .055"

APPROVALS:

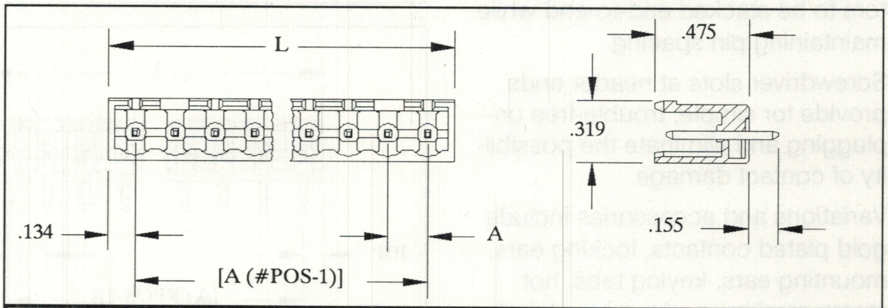
UL recognized under File No. E83421

CSA recognized under File No. LR69703-2

Meets **VDE** 0627 per **TUV** license No. BL 94 05 20396 001



- HIGH TEMPERATURE POLYESTER
- CLOSED ENDS PROTECT PINS
- SCREWDRIVER SLOT EASES UNPLUGGING
- MATES WITH PCD AND OTHER PLUGS
- 2 TO 24 POSITIONS



POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM
2	ELFH02250	.47	ELFH02150	11.75
3	ELFH03250	.67	ELFH03150	16.75
4	ELFH04250	.87	ELFH04150	21.75
5	ELFH05250	1.07	ELFH05150	26.75
6	ELFH06250	1.27	ELFH06150	31.75
7	ELFH07250	1.47	ELFH07150	36.75
8	ELFH08250	1.67	ELFH08150	41.75
9	ELFH09250	1.87	ELFH09150	46.75
10	ELFH10250	2.07	ELFH10150	51.75
11	ELFH11250	2.27	ELFH11150	56.75
12	ELFH12250	2.47	ELFH12150	61.75
13	ELFH13250	2.67	ELFH13150	66.75
14	ELFH14250	2.87	ELFH14150	71.75
15	ELFH15250	3.07	ELFH15150	76.75
16	ELFH16250	3.27	ELFH16150	81.75
17	ELFH17250	3.47	ELFH17150	86.75
18	ELFH18250	3.67	ELFH18150	91.75
19	ELFH19250	3.87	ELFH19150	96.75
20	ELFH20250	4.07	ELFH20150	101.75
21	ELFH21250	4.27	ELFH21150	106.75
22	ELFH22250	4.47	ELFH22150	111.75
23	ELFH23250	4.67	ELFH23150	116.75
24	ELFH24250	4.87	ELFH24150	121.75

ELFH Vertical Header - Open .200"/5.0 mm

ELFH headers mate with PCD ELFP pluggable terminal blocks. Universal design also mates with a wide variety of competitive plugs.

Headers are molded of a high temperature polyester material, which provides much higher operating temperature capability than similar nylon or polypropylene connectors. This eliminates the possibility of connector damage or deformation caused by the heat of soldering.

Open-end design allows connectors to be stacked end-to-end while maintaining pin spacing.

Screwdriver slots at header ends provide for simple, trouble-free unplugging and eliminate the possibility of contact damage.

Variations and accessories include gold plated contacts, locking ears, mounting ears, keying tabs, hot stamp marking and marking labels. Details are on pages 28-29.

MATERIALS:

Housing: Black polyester (green optional)

Contact: Copper alloy

Plating: Electrolytic tin

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 3000 V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

INSTALLATION:

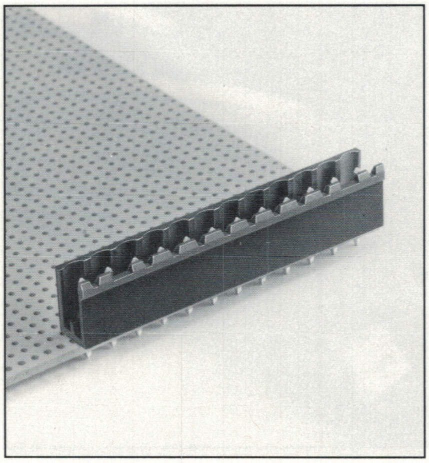
Hole Diameter: .055"

APPROVALS:

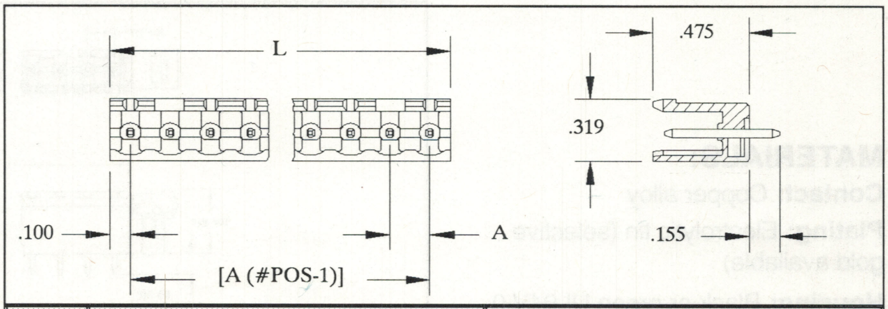
UL recognized under File No. E83421

CSA recognized under File No. LR69703-2

Meets **VDE** 0627 per **TUV** license No. BL 94 05 20396 001



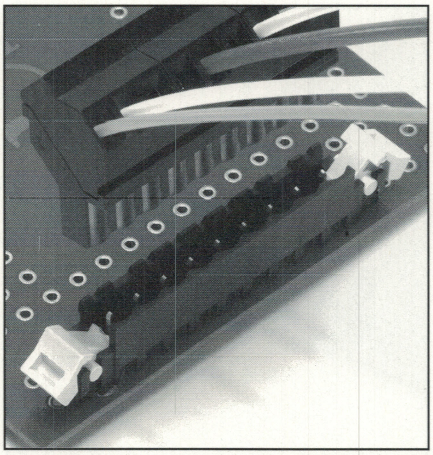
- **HIGH TEMPERATURE POLYESTER**
- **END-TO-END STACKABLE**
- **SCREWDRIVER SLOT EASES UNPLUGGING**
- **MATES WITH PCD AND OTHER PLUGS**
- **2 TO 24 POSITIONS**



POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM
2	ELFH02260	.40	ELFH02160	10.0
3	ELFH03260	.60	ELFH03160	15.0
4	ELFH04260	.80	ELFH04160	20.0
5	ELFH05260	1.00	ELFH05160	25.0
6	ELFH06260	1.20	ELFH06160	30.0
7	ELFH07260	1.40	ELFH07160	35.0
8	ELFH08260	1.60	ELFH08160	40.0
9	ELFH09260	1.80	ELFH09160	45.0
10	ELFH10260	2.00	ELFH10160	50.0
11	ELFH11260	2.20	ELFH11160	55.0
12	ELFH12260	2.40	ELFH12160	60.0
13	ELFH13260	2.60	ELFH13160	65.0
14	ELFH14260	2.80	ELFH14160	70.0
15	ELFH15260	3.00	ELFH15160	75.0
16	ELFH16260	3.20	ELFH16160	80.0
17	ELFH17260	3.40	ELFH17160	85.0
18	ELFH18260	3.60	ELFH18160	90.0
19	ELFH19260	3.80	ELFH19160	95.0
20	ELFH20260	4.00	ELFH20160	100.0
21	ELFH21260	4.20	ELFH21160	105.0
22	ELFH22260	4.40	ELFH22160	110.0
23	ELFH23260	4.60	ELFH23160	115.0
24	ELFH24260	4.80	ELFH24160	120.0

ELFH Ejector Ear Headers .200”

The new ELFH Series ejector ear headers allow for effortless disconnect of plugs using either a screwdriver or a finger to actuate the special ears. Universal design mates with PCD's ELF or FXP Flexiplug Series. Available in 8 through 22 positions. Optional gold plating is also available. Note that green headers have black ears, and black headers have gray ears. Part numbers listed are for black. To order green, change the last character in the part number from 0 to G.



- **INNOVATIVE AND EFFORTLESS PLUG REMOVAL**
- **IDEAL FOR TIGHT INSTALLATIONS**

MATERIALS:

Contact: Copper alloy

Plating: Electrolytic tin (selective gold available)

Housing: Black or green UL94V-0 thermoplastic

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 1600 V

Current Rating: 15 A

Operating Voltage: 300 V

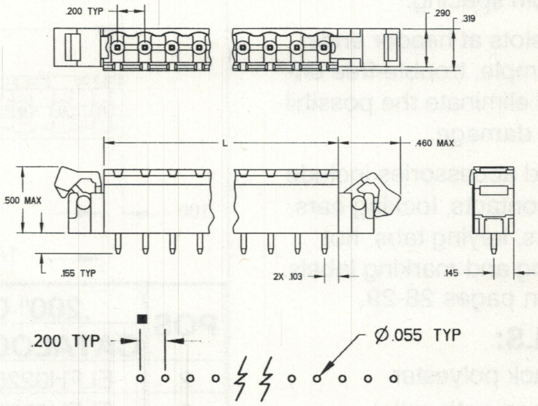
Insulation Resistance: 10^{11} ohms

INSTALLATION:

PCB Hole Diameter: .055"

APPROVALS:

UL recognized,CSA approval pending.



POS	.200” CENTERS (A)	
	CATALOG #	L INCHES
8	ELFH08270	1.606
9	ELFH09270	1.806
10	ELFH10270	2.006
11	ELFH11270	2.206
12	ELFH12270	2.406
13	ELFH13270	2.606
14	ELFH14270	2.806
15	ELFH15270	3.006
16	ELFH16270	3.206
17	ELFH17270	3.406
18	ELFH18270	3.606
19	ELFH19270	3.806
20	ELFH20270	4.006
21	ELFH21270	4.206
22	ELFH22270	4.406

ELFD 2-Tier Stackable Header Module

.200"/5.0 mm

ELFD 2-tier headers are designed to increase board density by accepting two plugs in a vertical or horizontal double row configuration. Contact rows are offset to facilitate handling and wire installation. Plugs may also be installed side-by-side without losing contact position.

Headers consist of 4- and 6-position stackable modules which can be readily interlocked to form a rigid assembly. Modules can be ordered and stocked individually to minimize inventory, or specific assemblies can be ordered from PCD (see catalog numbers on following page).

Housings are molded of high temperature polyester, which provides much higher operating temperature capability than similar nylon or polypropylene connectors. This eliminates the possibility of connector damage or deformation caused by the heat of soldering.

ELFD headers mate with PCD ELF series pluggable terminal blocks. Universal design also mates with a wide variety of competitive plugs.

MATERIALS:

Housing: Black polyester (green optional)

Contact: Copper alloy

Plating: Electrolytic tin

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 3000 V

Current Rating: 10 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

INSTALLATION:

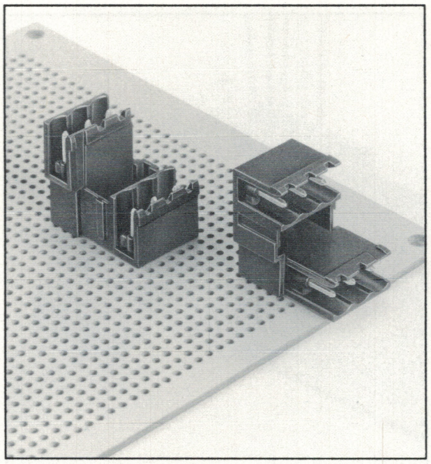
Hole Diameter: .055"

APPROVALS:

UL Recognized under File No. E83421

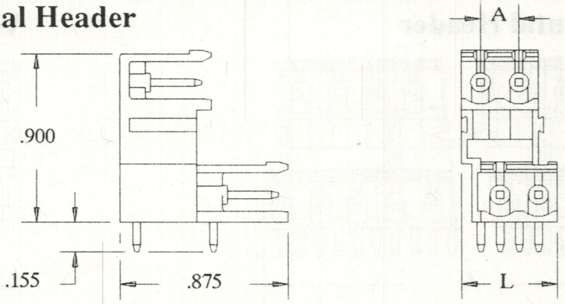
CSA Recognized under File No. LR69703

Meets **VDE** 0627 per **TUV** license No. BL 94 05 20396 001



- **2-TIER FOR HIGHER DENSITY**
- **4-6 POSITIONS**
- **ASSEMBLE TO SIZE**
- **HIGH TEMPERATURE POLYESTER**
- **HORIZONTAL AND VERTICAL**
- **MATES WITH PCD AND OTHER PLUGS**

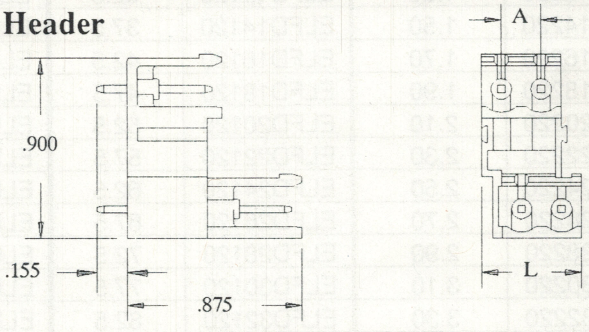
Horizontal Header



4-POSITION SHOWN

POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM
4	ELFD04220	.50	ELFD04120	12.5
6	ELFD06220	.70	ELFD06120	17.5

Vertical Header



4-POSITION SHOWN

POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM
4	ELFD04260	.50	ELFD04160	12.5
6	ELFD06260	.70	ELFD06160	17.5

ELFD 2-Tier Stackable Header Assemblies

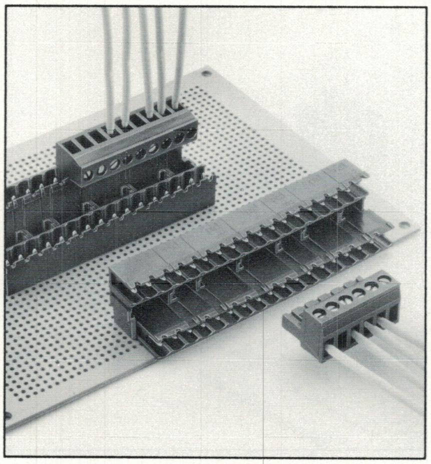
.200"/5.0 mm

Connector assemblies are available from PCD or PCD distributors and assembled from standard ELFD 2-tier header modules as indicated on preceding page.

High temperature polyester material eliminates the possibility of connector damage or deformation caused by the heat of soldering.

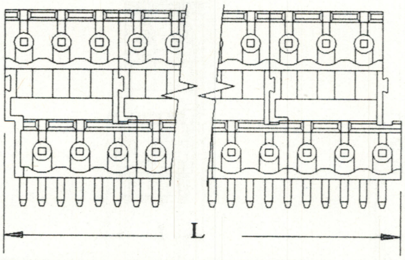
Rigid module interlock provides for a reliable, sturdy assembly.

Contact PCD for details on gold plated contact, keying and marking options.

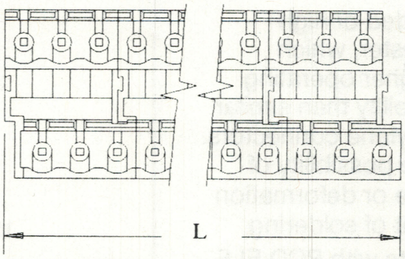


- **FIRMLY INTERLOCKED ASSEMBLY**
- **HIGHER DENSITY**
- **HIGH TEMPERATURE POLYESTER**
- **HORIZONTAL AND VERTICAL**
- **MATES WITH PCD AND OTHER PLUGS**

Horizontal Header



Vertical Header



POS	HORIZONTAL HEADER				VERTICAL HEADER			
	.200" CENTERS (A)		5.0 MM CENTERS (A)		200" CENTERS (A)		5.0 MM CENTERS (A)	
	CATALOG #	L INCHES	CATALOG #	L MM	CATALOG #	L INCHES	CATALOG #	L MM
4	ELFD04220	.50	ELFD04120	12.5	ELFD04260	.50	ELFD04160	12.5
6	ELFD06220	.70	ELFD06120	17.5	ELFD06260	.70	ELFD06160	17.5
8	ELFD08220	.90	ELFD08120	22.5	ELFD08260	.90	ELFD08160	22.5
10	ELFD10220	1.10	ELFD10120	27.5	ELFD10260	1.10	ELFD10160	27.5
12	ELFD12220	1.30	ELFD12120	32.5	ELFD12260	1.30	ELFD12160	32.5
14	ELFD14220	1.50	ELFD14120	37.5	ELFD14260	1.50	ELFD14160	37.5
16	ELFD16220	1.70	ELFD16120	42.5	ELFD16260	1.70	ELFD16160	42.5
18	ELFD18220	1.90	ELFD18120	47.5	ELFD18260	1.90	ELFD18160	47.5
20	ELFD20220	2.10	ELFD20120	52.5	ELFD20260	2.10	ELFD20160	52.5
22	ELFD22220	2.30	ELFD22120	57.5	ELFD22260	2.30	ELFD22160	57.5
24	ELFD24220	2.50	ELFD24120	62.5	ELFD24260	2.50	ELFD24160	62.5
26	ELFD26220	2.70	ELFD26120	67.5	ELFD26260	2.70	ELFD26160	67.5
28	ELFD28220	2.90	ELFD28120	72.5	ELFD28260	2.90	ELFD28160	72.5
30	ELFD30220	3.10	ELFD30120	77.5	ELFD30260	3.10	ELFD30160	77.5
32	ELFD32220	3.30	ELFD32120	82.5	ELFD32260	3.30	ELFD32160	82.5
34	ELFD34220	3.50	ELFD34120	87.5	ELFD34260	3.50	ELFD34160	87.5
36	ELFD36220	3.70	ELFD36120	92.5	ELFD36260	3.70	ELFD36160	92.5
38	ELFD38220	3.90	ELFD38120	97.5	ELFD38260	3.90	ELFD38160	97.5
40	ELFD40220	4.10	ELFD40120	102.5	ELFD40260	4.10	ELFD40160	102.5
42	ELFD42220	4.30	ELFD42120	107.5	ELFD42260	4.30	ELFD42160	107.5
44	ELFD44220	4.50	ELFD44120	112.5	ELFD44260	4.50	ELFD44160	112.5
46	ELFD46220	4.70	ELFD46120	117.5	ELFD46260	4.70	ELFD46160	117.5
48	ELFD48220	4.90	ELFD48120	122.5	ELFD48260	4.90	ELFD48160	122.5

ELFA 2-Tier In-Line I/O Headers

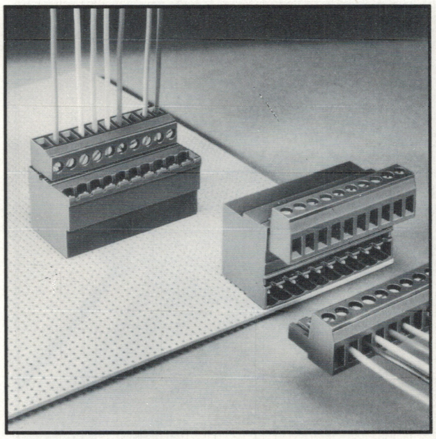
.200"/5.0 mm

ELFA 2-tier in-line headers increase board density by accepting two plugs in a vertical or horizontal double row configuration. In-line contact rows and end walls provide a compact, rectangular mating face ideal for panel cut-outs and equipment I/O applications. Plugs may be installed side-by-side without losing contact position.

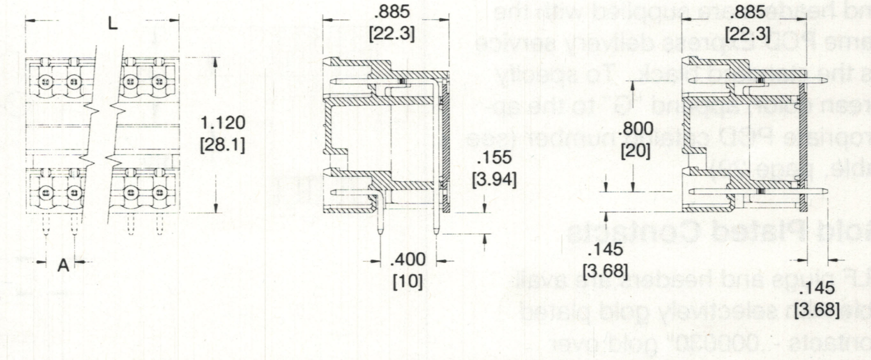
Housings are molded of high temperature polyamide, selected to eliminate connector damage or deformation caused by the heat of soldering.

ELFA headers mate with PCD ELF series pluggable terminal blocks. Universal design also mates with a wide variety of competitive plugs.

Variations and accessories include gold plated contacts, keying tabs, hot stamp marking, and marking labels.



- **2-TIER FOR HIGHER DENSITY**
- **2-20 POSITIONS PER LEVEL**
- **HIGH TEMPERATURE POLYAMIDE**
- **HORIZONTAL AND VERTICAL**
- **MATES WITH PCD AND OTHER PLUGS**



DIMENSIONS OF PARTS WITH 5.0 MM CENTERS ARE IN BRACKETS

MATERIALS:

Housing: Black polyamide

Contact: Copper alloy

Plating: Electrolytic tin

SPECIFICATIONS:

Maximum Operating Temperature: 125° C

Dielectric Withstanding: 3000 V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

INSTALLATION:

Hole Diameter: .055"

APPROVALS:

UL Recognized under File No. E83421

CSA Recognized under File No. LR69703

Meets **VDE** 0627 per **TUV** license No. BL 94 05 20396 001

POS	.200' CENTERS (A)			5.0 MM CENTERS (A)		
	HORIZ	VERTICAL	L INCHES	HORIZ	VERTICAL	L MM
4	ELFA04210	ELFA04250	.50	ELFA04110	ELFA04150	12.5
6	ELFA06210	ELFA06250	.70	ELFA06110	ELFA06150	17.5
8	ELFA08210	ELFA08250	.90	ELFA08110	ELFA08150	22.5
10	ELFA10210	ELFA10250	1.10	ELFA10110	ELFA10150	27.5
12	ELFA12210	ELFA12250	1.30	ELFA12110	ELFA12150	32.5
14	ELFA14210	ELFA14250	1.50	ELFA14110	ELFA14150	37.5
16	ELFA16210	ELFA16250	1.70	ELFA16110	ELFA16150	42.5
18	ELFA18210	ELFA18250	1.90	ELFA18110	ELFA18150	47.5
20	ELFA20210	ELFA20250	2.10	ELFA20110	ELFA20150	52.5
22	ELFA22210	ELFA22250	2.30	ELFA22110	ELFA22150	57.5
24	ELFA24210	ELFA24250	2.50	ELFA24110	ELFA24150	62.5
26	ELFA26210	ELFA26250	2.70	ELFA26110	ELFA26150	67.5
28	ELFA28210	ELFA28250	2.90	ELFA28110	ELFA28150	72.5
30	ELFA30210	ELFA30250	3.10	ELFA30110	ELFA30150	77.5
32	ELFA32210	ELFA32250	3.30	ELFA32110	ELFA32150	82.5
34	ELFA34210	ELFA34250	3.50	ELFA34110	ELFA34150	87.5
36	ELFA36210	ELFA36250	3.70	ELFA36110	ELFA36150	92.5
38	ELFA38210	ELFA38250	3.90	ELFA38110	ELFA38150	97.5
40	ELFA40210	ELFA40250	4.10	ELFA40110	ELFA40150	102.5

ELF Accessories and Variations

ELF Options

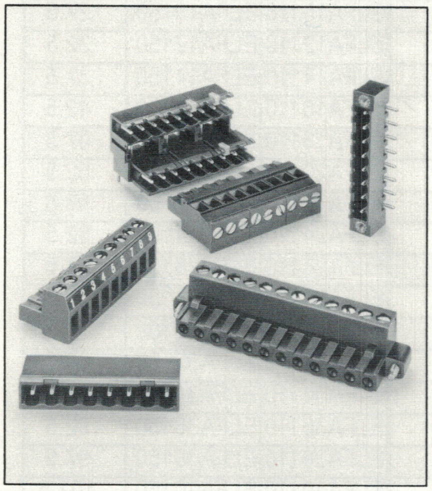
Optional plug and header accessories and variations, as detailed below, greatly expand the application range and flexibility of the ELF line. Please contact PCD for additional details or application guidance where required.

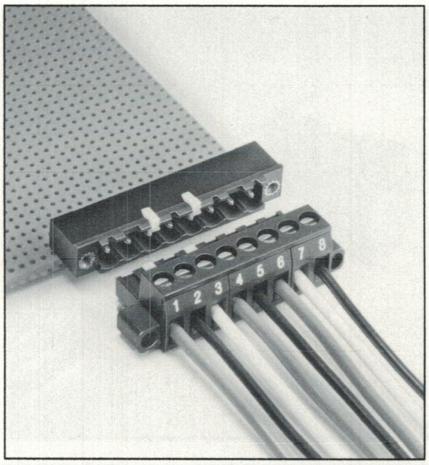
Color

The standard color for PCD fixed and pluggable terminal blocks and headers is black. All .200"/5.0mm products are also available in green as an alternate color. Green blocks and headers are supplied with the same PCD Express delivery service as the standard black. To specify green color, append "G" to the appropriate PCD catalog number (see table, page 29)

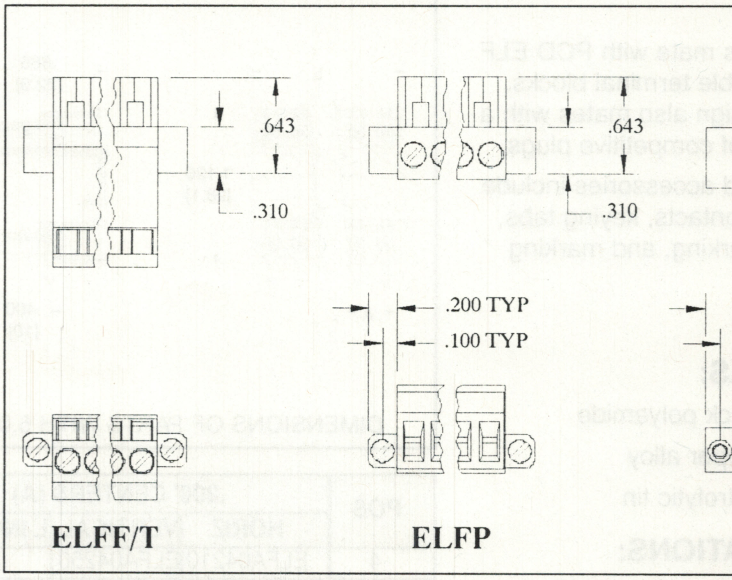
Gold Plated Contacts

ELF plugs and headers are available with selectively gold plated contacts - .000030" gold over .000050" nickel - for critical applications involving low level circuits or more severe environmental considerations. Selective gold plating is specified by indicating "1" as the ninth digit of the PCD catalog number (see table page 29)





- **GOLD PLATING**
- **LOCKING EARS**
- **MOUNTING EARS**
- **KEYING**
- **MARKING**



Locking Ears

Integrally molded locking ears are available with all ELF plugs and ELFH header configurations for use in high stress or high vibration applications, or where unintentional disconnect must be prevented. Plug ears capture a floating, slot-head locking screw which engages a threaded insert on the header ear. The mounting screw is tightened after plug and header are mated, firmly securing the connection.

The plug ear and locking screw can also be used in special applications to secure the plug directly to a bulkhead, if threading provisions are made in the bulkhead.

Locking ears add one contact position in length to each end of the plug or header (see dimensional details above).

To specify locking ears, append "E" to the appropriate PCD catalog number (see table page 29)

In cases where a combination of ELF options are specified - for example: gold plating, locking ears and green color - please contact PCD for catalog number guidance.

ELF Accessories and Variations

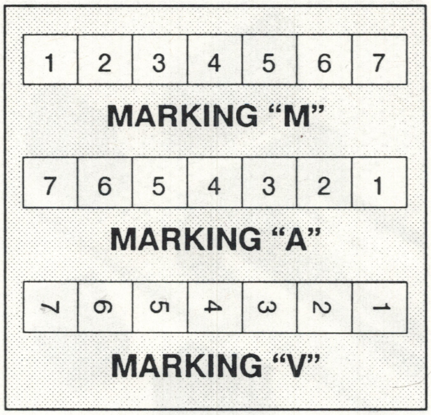
Mounting Ears

Header locking ears, complete with threaded inserts, can also be utilized as mounting ears to secure headers to printed boards (vertical mount) or bulkheads.

Alternatively, headers or plugs can be provided with integral mounting ears which feature the same external dimensions as the locking ears, and in-line or perpendicular through-holes for mounting purposes. Contact PCD for details.

Keying

PCD ELF plugs and headers are designed to accept tabs which lock into keyways in the body molding, and can be configured to ensure correct mating of physically similar but electrically unique connector elements in a complex system.



The bright yellow keying tabs provide a visual confirmation of correct mating as well as a physical guarantee. Keying is accomplished without the loss of a contact position, as opposed to other systems which block one contact to provide discrimination.

Connectors to be keyed are configured with an appropriate combination of keying tabs, so that plugs are prevented from entering the wrong header.

ELFKEY100 header keys are supplied in groups of 8.

ELFKEY200 plug keys are supplied in groups of 6.

ELF VARIATIONS AND ACCESSORIES

PART NUMBERING GUIDE

PLATING, MOUNTING AND MARKING VARIATIONS

ELF X XX X X X X

TYPE
H = Header
P = Plug
F = Front/Front Plug
T = Straight Plug
D = 2-Tier Stackable
A = 2-Tier In-Line

SIZE
(Number of positions)

SPACING
1 = 5.0 MM (.197")
2 = .200" (5.08 MM)

STYLE
(See appropriate page)

E = Locking Ears

0 = Standard
1 = .000030" Gold
G = Green
A = Right-to-Left Marking
M = Left-to-Right Marking
V = Top-to-Bottom Marking

Contact PCD for specification assistance.

Marking Labels

Stick-on marking labels, printed on fabric, are available in two versions: ELFLABEL1, numbered 1 through 12; and ELFLABEL2, numbered 13 through 24. Each sheet contains 25 peel-off strips.

Marking

ELF plugs are available with a variety of standard and special hot stamp markings (see photo page 28). Marking alternates include left-to-right horizontal numbers (specified by indicating "M" as the ninth digit of the catalog number), right-to-left horizontal numbers (ninth digit "A"), and top-to-bottom vertical numbers (ninth digit "V").

Please contact PCD regarding header marking, or to discuss requirements for special plug or header marking.

.400"/10.0 MM Terminal Blocks

All .200"/5.0mm spacing terminal blocks indicated on pages 14-24 and 30-34 are also available on .400" or 10.0mm centers for power or other special applications. Contact PCD for details.

Special ELF Variations

In addition to the standard ELF product variations indicated in this catalog, PCD is a leading supplier of special block configurations and modifications, tailored to meet unusual system design requirements, solve unusual problems, or provide unique product identification or capability.

PCD's U.S.-based in-house fabrication and engineering staff facilitate product flexibility and concentration on customer-oriented product development and innovation. PCD welcomes your inquiries for non-standard product variations.

ELM Modular Terminal Block Horizontal Wire Entry

.200"/5.0 mm

Stackable terminal block with wire entry horizontal to the plane of the board. The ELM family consists of precision molded 2- and 3-position screw termination modules with interlocking side ribs. Modules can be readily and firmly joined together and assembled to length without loss of pin spacing.

PCD's high reliability floating vise clamp screw termination assures direct high pressure interconnection between contact and wire. Two-piece construction of the floating clamp prevents screw torque from being transmitted to the pin and damaging the solder joint.

Expanded 12-28 AWG wire range with minimized connector size provides a low-profile termination for #12 AWG applications.

High temperature polyester compound provides for dimensional stability during solder operation.

MATERIALS:

Housing: Black polyester (green optional)

Contact: Copper alloy

Plating: Electrolytic tin

Hardware: #4-40 steel screw, zinc plated

SPECIFICATIONS:

Maximum Operating Temperature: 105°C

Dielectric Withstanding: 3000 V

Current Rating: 10 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: AWG #12-28

Wire Pullout Force: Meets UL 486

INSTALLATION:

Wire Strip Length: .250"

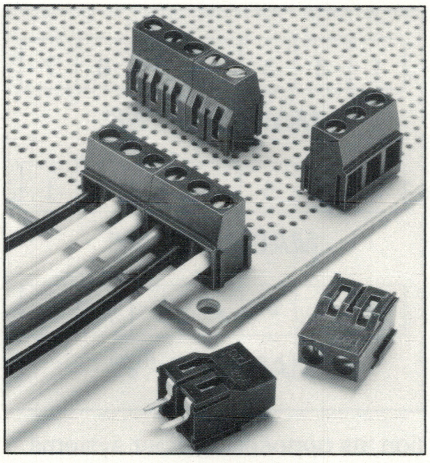
Tightening Torque: 7 in-lbs.

Hole Diameter: .051"

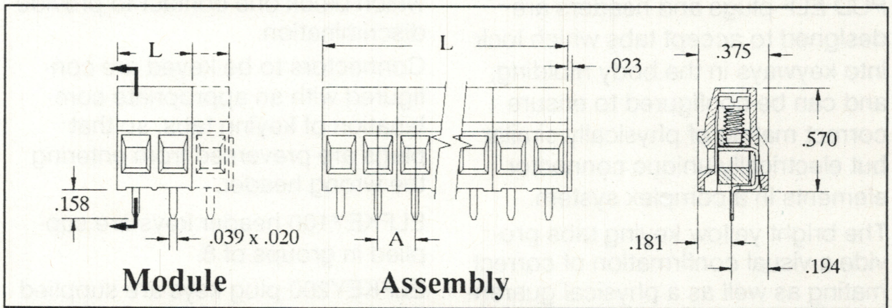
APPROVALS:

UL recognized under File No. E83421

CSA recognized under File No. LR69703-2



- ACCEPTS #12 TO #28 AWG
- REDUCED PROFILE
- INTERLOCKING MODULES
- MOVING VISE CLAMP WIRE TERMINATION
- HIGH TEMPERATURE POLYESTER



STYLE	POS	.200" CENTERS (A)		5.0 MM CENTERS (A)	
		CATALOG #	L INCHES	CATALOG #	L MM
MODULE	2	ELM021200	.40	ELM021100	10.0
	3	ELM031200	.60	ELM031100	15.0
ASSEMBLY	4	ELM041200	.80	ELM041100	20.0
	5	ELM051200	1.00	ELM051100	25.0
	6	ELM061200	1.20	ELM061100	30.0
	7	ELM071200	1.40	ELM071100	35.0
	8	ELM081200	1.60	ELM081100	40.0
	9	ELM091200	1.80	ELM091100	45.0
	10	ELM101200	2.00	ELM101100	50.0
	11	ELM111200	2.20	ELM111100	55.0
	12	ELM121200	2.40	ELM121100	60.0
	13	ELM131200	2.60	ELM131100	65.0
	14	ELM141200	2.80	ELM141100	70.0
	15	ELM151200	3.00	ELM151100	75.0
	16	ELM161200	3.20	ELM161100	80.0
	17	ELM171200	3.40	ELM171100	85.0
	18	ELM181200	3.60	ELM181100	90.0
	19	ELM191200	3.80	ELM191100	95.0
	20	ELM201200	4.00	ELM201100	100.0
	21	ELM211200	4.20	ELM211100	105.0
	22	ELM221200	4.40	ELM221100	110.0
	23	ELM231200	4.60	ELM231100	115.0
	24	ELM241200	4.80	ELM241100	120.0

ELM Modular Terminal Block
Angled Wire Entry

.200"/5.0 mm

Stackable terminal block with wire entry at a 35° angle to the plane of the board. The ELM family consists of precision molded 2- and 3-position screw termination modules with interlocking side ribs. Modules can be readily and firmly joined together and assembled to length without loss of pin spacing.

PCD's high reliability floating vise clamp screw termination assures direct high pressure interconnection between contact and wire. Two-piece construction of the floating clamp prevents screw torque from being transmitted to the pin and damaging the solder joint.

Expanded 12-28 AWG wire range with minimized connector size provides a low-profile termination for #12 AWG applications.

High temperature polyester compound provides for dimensional stability during solder operation.

MATERIALS:

Housing: Black polyester (green optional)
Contact: Copper alloy
Plating: Electrolytic tin
Hardware: #4-40 steel screw, zinc plated

SPECIFICATIONS:

Maximum Operating Temperature: 105°C
Dielectric Withstanding: 3000 V
Current Rating: 10 A
Operating Voltage: 300 V
Insulation Resistance: 10^{11} ohms
Wire Range: AWG #12-28
Wire Pullout Force: Meets UL 486

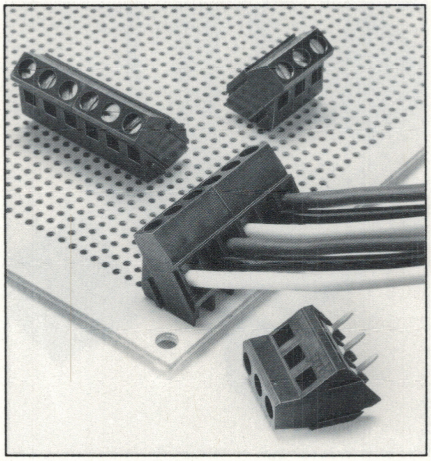
INSTALLATION:

Wire Strip Length: .250"
Tightening Torque: 7 in-lbs.
Hole Diameter: .051"

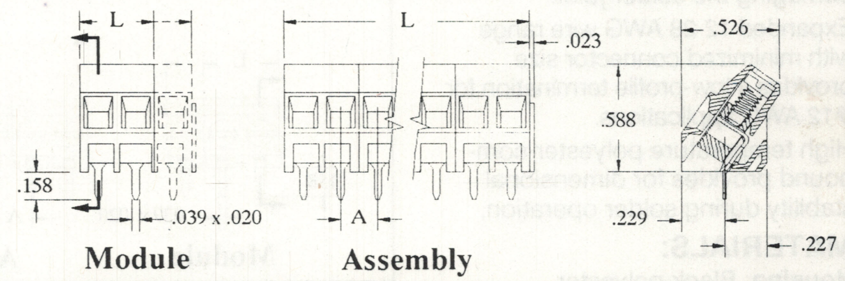
APPROVALS:

UL recognized under File No. E83421

CSA recognized under File No. LR69703-2



- **ACCEPTS #12 TO #28 AWG**
- **REDUCED PROFILE**
- **INTERLOCKING MODULES**
- **MOVING VISE CLAMP WIRE TERMINATION**
- **HIGH TEMPERATURE POLYESTER**



STYLE	POS	.200" CENTERS (A) CATALOG #	.200" CENTERS (A) L INCHES	5.0 MM CENTERS (A) CATALOG #	5.0 MM CENTERS (A) L MM
MODULE	2	ELM023200	.40	ELM023100	10.0
	3	ELM033200	.60	ELM033100	15.0
ASSEMBLY	4	ELM043200	.80	ELM043100	20.0
	5	ELM053200	1.00	ELM053100	25.0
	6	ELM063200	1.20	ELM063100	30.0
	7	ELM073200	1.40	ELM073100	35.0
	8	ELM083200	1.60	ELM083100	40.0
	9	ELM093200	1.80	ELM093100	45.0
	10	ELM103200	2.00	ELM103100	50.0
	11	ELM113200	2.20	ELM113100	55.0
	12	ELM123200	2.40	ELM123100	60.0
	13	ELM133200	2.60	ELM133100	65.0
	14	ELM143200	2.80	ELM143100	70.0
	15	ELM153200	3.00	ELM153100	75.0
	16	ELM163200	3.20	ELM163100	80.0
	17	ELM173200	3.40	ELM173100	85.0
	18	ELM183200	3.60	ELM183100	90.0
	19	ELM193200	3.80	ELM193100	95.0
	20	ELM203200	4.00	ELM203100	100.0
	21	ELM213200	4.20	ELM213100	105.0
	22	ELM223200	4.40	ELM223100	110.0
	23	ELM233200	4.60	ELM233100	115.0
	24	ELM243200	4.80	ELM243100	120.0

ELM Modular Terminal Block Vertical Wire Entry

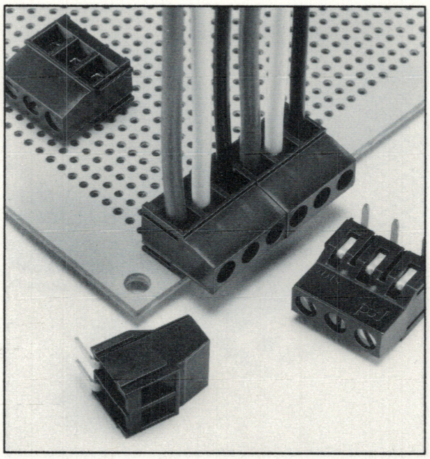
.200"/5.0 mm

Stackable terminal block with wire entry vertical to the plane of the board. The ELM family consists of precision molded 2- and 3-position screw termination modules with interlocking side ribs. Modules can be readily and firmly joined together and assembled to length without loss of pin spacing.

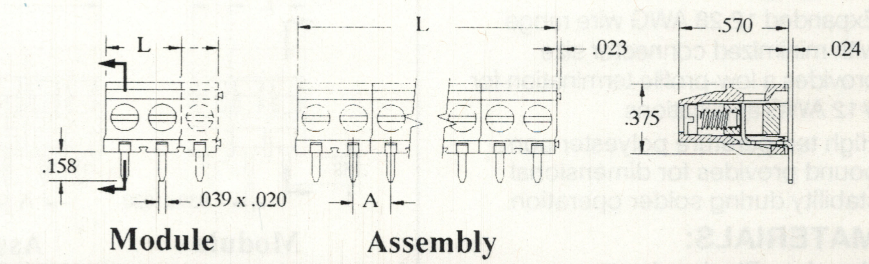
PCD's high reliability floating vise clamp screw termination assures direct high pressure interconnection between contact and wire. Two-piece construction of the floating clamp prevents screw torque from being transmitted to the pin and damaging the solder joint.

Expanded 12-28 AWG wire range with minimized connector size provides a low-profile termination for #12 AWG applications.

High temperature polyester compound provides for dimensional stability during solder operation.



- **ACCEPTS #12 TO #28 AWG**
- **REDUCED PROFILE**
- **INTERLOCKING MODULES**
- **MOVING VISE CLAMP WIRE TERMINATION**
- **HIGH TEMPERATURE POLYESTER**



MATERIALS:

Housing: Black polyester (green optional)

Contact: Copper alloy

Plating: Electrolytic tin

Hardware: #4-40 steel screw, zinc plated

SPECIFICATIONS:

Maximum Operating Temperature: 105°C

Dielectric Withstanding: 3000 V

Current Rating: 10 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: AWG #12-28

Wire Pullout Force: Meets UL 486

INSTALLATION:

Wire Strip Length: .250"

Tightening Torque: 7 in-lbs.

Hole Diameter: .051"

APPROVALS:

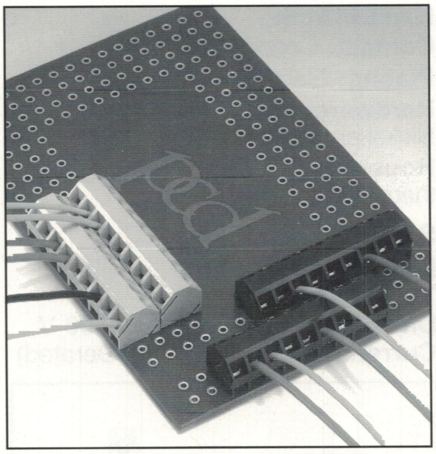
UL recognized under File No. E83421

CSA recognized under File No. LR69703-2

STYLE	POS	.200" CENTERS (A) CATALOG #	L INCHES	5.0 MM CENTERS (A) CATALOG #	L MM
MODULE	2	ELM029200	.40	ELM029100	10.0
	3	ELM039200	.60	ELM039100	15.0
ASSEMBLY	4	ELM049200	.80	ELM049100	20.0
	5	ELM059200	1.00	ELM059100	25.0
	6	ELM069200	1.20	ELM069100	30.0
	7	ELM079200	1.40	ELM079100	35.0
	8	ELM089200	1.60	ELM089100	40.0
	9	ELM099200	1.80	ELM099100	45.0
	10	ELM109200	2.00	ELM109100	50.0
	11	ELM119200	2.20	ELM119100	55.0
	12	ELM129200	2.40	ELM129100	60.0
	13	ELM139200	2.60	ELM139100	65.0
	14	ELM149200	2.80	ELM149100	70.0
	15	ELM159200	3.00	ELM159100	75.0
	16	ELM169200	3.20	ELM169100	80.0
	17	ELM179200	3.40	ELM179100	85.0
	18	ELM189200	3.60	ELM189100	90.0
	19	ELM199200	3.80	ELM199100	95.0
	20	ELM209200	4.00	ELM209100	100.0
	21	ELM219200	4.20	ELM219100	105.0
	22	ELM229200	4.40	ELM229100	110.0
	23	ELM239200	4.60	ELM239100	115.0
	24	ELM249200	4.80	ELM249100	120.0

ELMM 45° Modular Terminal Blocks .200”

New ELMM Series angled board-mount connectors incorporate a 45° design to maximize use of space by allowing terminal blocks to be stacked front-to-back. This ensures that users have full access to wires and screws even when the blocks are fully wired. The terminal blocks are molded as modules with interlocking side ribs, and can be assembled to length without loss of pin spacing. Standard ELMM parts up to 10 positions are a one-piece molding; longer parts are manufactured as assemblies. Part numbers listed here are for black. To order green, change the 8th character in the part number from 0 to 2.



- ACCEPTS #16 TO #26 AWG
- REDUCED PROFILE
- INTERLOCKING MODULES
- MOVING VISE CLAMP WIRE TERMINATION

MATERIALS:

Contact: Copper alloy

Plating: Electrolytic tin

Hardware: M3 Copper alloy, Nickel plated

Housing: Black or green UL94V-0 thermoplastic

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 1600 V

Current Rating: 10 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: # 16-26 AWG

Wire Pullout Force: Per UL486E

INSTALLATION:

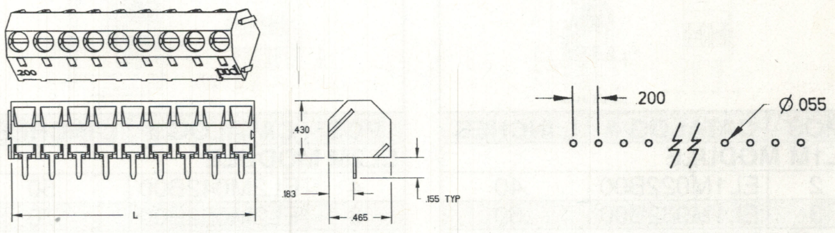
Wire Strip Length: .250”

Tightening Torque: 7 in-lbs.

PCB Hole Diameter: .055”

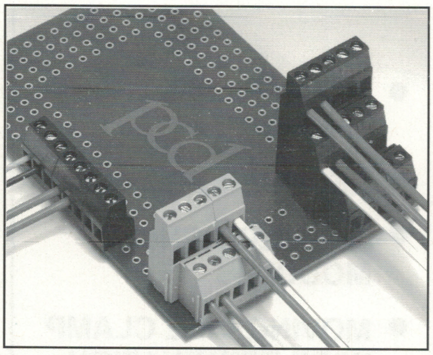
APPROVALS:

UL recognized,CSA approval pending.



STYLE	POS	.200” CENTERS (A)	
		CATALOG #	L INCHES
MODULE	2	ELMM02100	0.40
	3	ELMM03100	0.60
	4	ELMM04100	0.80
	5	ELMM05100	1.00
	6	ELMM06100	1.20
	7	ELMM07100	1.40
	8	ELMM08100	1.60
	9	ELMM09100	1.80
	10	ELMM10100	2.00
ASSEMBLY	11	ELMM11100	2.20
	12	ELMM12100	2.40
	13	ELMM13100	2.60
	14	ELMM14100	2.80
	15	ELMM15100	3.00
	16	ELMM16100	3.20
	17	ELMM17100	3.40
	18	ELMM18100	3.60
	19	ELMM19100	3.80
	20	ELMM20100	4.00
	21	ELMM21100	4.20
	22	ELMM22100	4.40
	23	ELMM23100	4.60
	24	ELMM24100	4.80

EL1M, EL2M, & EL3M
Multi-Tier Modular Terminal Blocks .200"



MATERIALS:
Contact: Copper alloy
Plating: Electrolytic tin
Hardware: M3 Copper alloy, Nickel plated
Housing: Black or green UL94V-0 thermoplastic

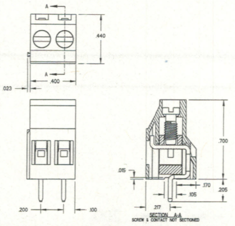
SPECIFICATIONS:
Maximum Operating Temperature: 105° C
Dielectric Withstanding: 1600 V
Current Rating: 20A (28A Derated)

Operating Voltage: 300 V
Insulation Resistance: 10^9 ohms
Wire Range: # 12-30 AWG
Wire Pullout Force: Per UL486E

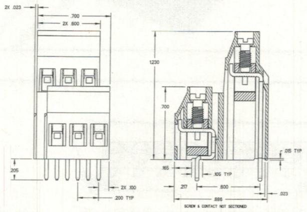
INSTALLATION:
Wire Strip Length: .310"
Tightening Torque: 7 in-lbs.
PCB Hole Diameter: .053"

APPROVALS:
UL recognized,CSA approval pending.

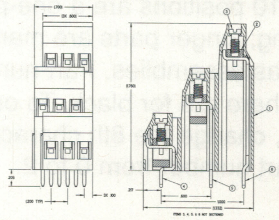
Part numbers listed are for black. To order green, change the 8th character in the part number from B to G.



POS	CATALOG #	L INCHES
EL1M MODULE		
2	EL1M022B00	.40
3	EL1M032B00	.60
EL1M ASSEMBLY		
4	EL1M042B00	.80
5	EL1M052B00	1.00
6	EL1M062B00	1.20
7	EL1M072B00	1.40
8	EL1M082B00	1.60
9	EL1M092B00	1.80
10	EL1M102B00	2.00
11	EL1M112B00	2.20
12	EL1M122B00	2.40
13	EL1M132B00	2.60
14	EL1M142B00	2.80
15	EL1M152B00	3.00
16	EL1M162B00	3.20
17	EL1M172B00	3.40
18	EL1M182B00	3.60
19	EL1M192B00	3.80
20	EL1M202B00	4.00
21	EL1M212B00	4.20
22	EL1M222B00	4.40
23	EL1M232B00	4.60
24	EL1M242B00	4.80
25	EL1M252B00	5.00
26	EL1M262B00	5.20
27	EL1M272B00	5.40
28	EL1M282B00	5.60
29	EL1M292B00	5.80
30	EL1M302B00	6.00
31	EL1M312B00	6.20
32	EL1M322B00	6.40



POS	CATALOG #	L INCHES
EL2M MODULE		
4	EL2M042B00	.50
6	EL2M062B00	.70
EL2M ASSEMBLY		
8	EL2M082B00	.90
10	EL2M102B00	1.10
12	EL2M122B00	1.30
14	EL2M142B00	1.50
16	EL2M162B00	1.70
18	EL2M182B00	1.90
20	EL2M202B00	2.10
22	EL2M222B00	2.30
24	EL2M242B00	2.50
26	EL2M262B00	2.70
28	EL2M282B00	2.90
30	EL2M302B00	3.10
32	EL2M322B00	3.30
34	EL2M342B00	3.50
36	EL2M362B00	3.70
38	EL2M382B00	3.90
40	EL2M402B00	4.10
42	EL2M422B00	4.30
44	EL2M442B00	4.50
46	EL2M462B00	4.70
48	EL2M482B00	4.90
50	EL2M502B00	5.10
52	EL2M522B00	5.30
54	EL2M542B00	5.50
56	EL2M562B00	5.70
58	EL2M582B00	5.90
60	EL2M602B00	6.10
62	EL2M622B00	6.30
64	EL2M642B00	6.50



POS	CATALOG #	L INCHES
EL3M MODULE		
6	EL3M062B00	.50
9	EL3M092B00	.70
EL3M ASSEMBLY		
12	EL3M122B00	.90
15	EL3M152B00	1.10
18	EL3M182B00	1.30
21	EL3M212B00	1.50
24	EL3M242B00	1.70
27	EL3M272B00	1.90
30	EL3M302B00	2.10
33	EL3M332B00	2.30
36	EL3M362B00	2.50
39	EL3M392B00	2.70
42	EL3M422B00	2.90
45	EL3M452B00	3.10
48	EL3M482B00	3.30
51	EL3M512B00	3.50
54	EL3M542B00	3.70
57	EL3M572B00	3.90
60	EL3M602B00	4.10
63	EL3M632B00	4.30
66	EL3M662B00	4.50
69	EL3M692B00	4.70
72	EL3M722B00	4.90
75	EL3M752B00	5.10
78	EL3M782B00	5.30
81	EL3M812B00	5.50
84	EL3M842B00	5.70
87	EL3M872B00	5.90
90	EL3M902B00	6.10
93	EL3M932B00	6.30
96	EL3M962B00	6.50

FXPT FlexiPlug™ Pluggable Terminal Block
Screw/Pressure Plate Termination .200”

PCD’s new FXPT terminal blocks feature U.S. style barrier block wire terminations designed for a standard screwdriver, and mate with PCD ELHF headers and many competitive European style scalloped headers. FlexiPlug™ can be used interchangeably with moving cage clamp style plugs, such as PCD’s ELF. Select either approach, or use both in the same system.

Screw/pressure plate termination systems (SEMS) in a tri-barrier configuration accept a #2 Phillips head 1/4” slotted screwdriver to provide easy wire termination and a strong mechanical and electrical connection.

MATERIALS:

Housing: Black PPO

Contact: Phosphor bronze

Plating: Tin-lead

Hardware: M3 SEM screw, steel, nickel plated

SPECIFICATIONS:

Maximum Operating Temperature: 105°C

Dielectric Withstanding: 3000V

Current Rating: 15 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: #12-26 AWG solid and stranded

Wire Pullout Force: Meets UL 486

INSTALLATION:

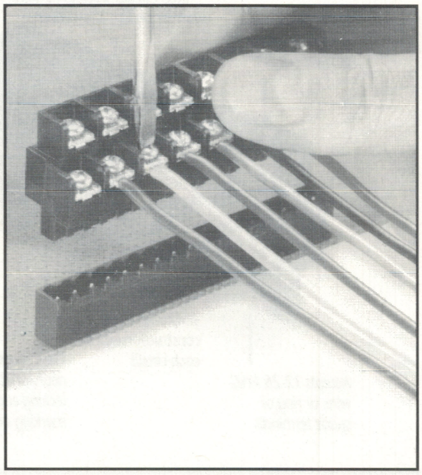
Wire Strip Length: .250”

Tightening Torque: 12 in-lbs.

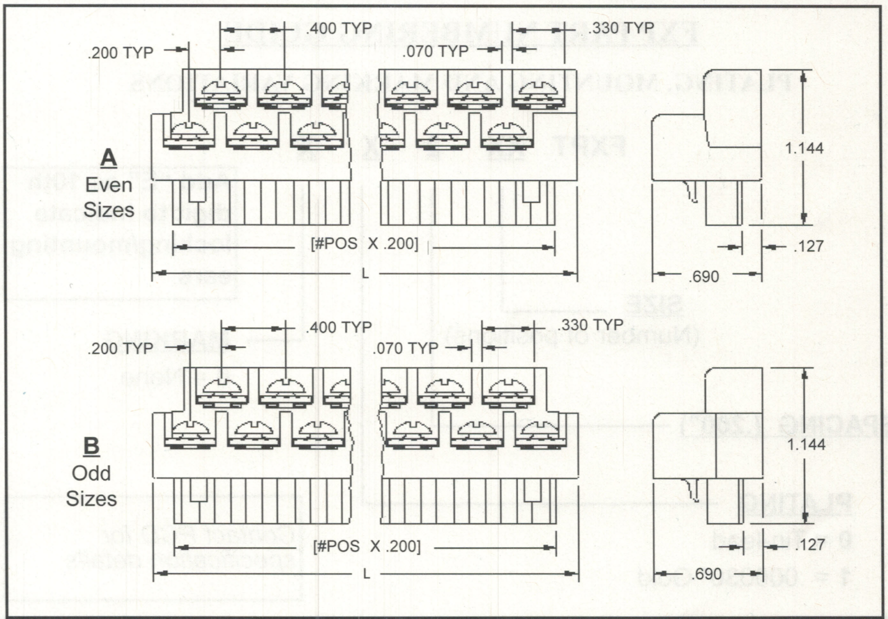
Screwdriver: #2 Phillips, 1/4” blade

APPROVAL:

UL recognized under File No. E83421



- **SCREW CLAMP WIRE TERMINATION**
- **TRI-BARRIER BLOCKS**
- **MATES WITH PCD AND OTHER PIN HEADERS**
- **.200” CENTERS**
- **2 TO 24 POSITIONS**

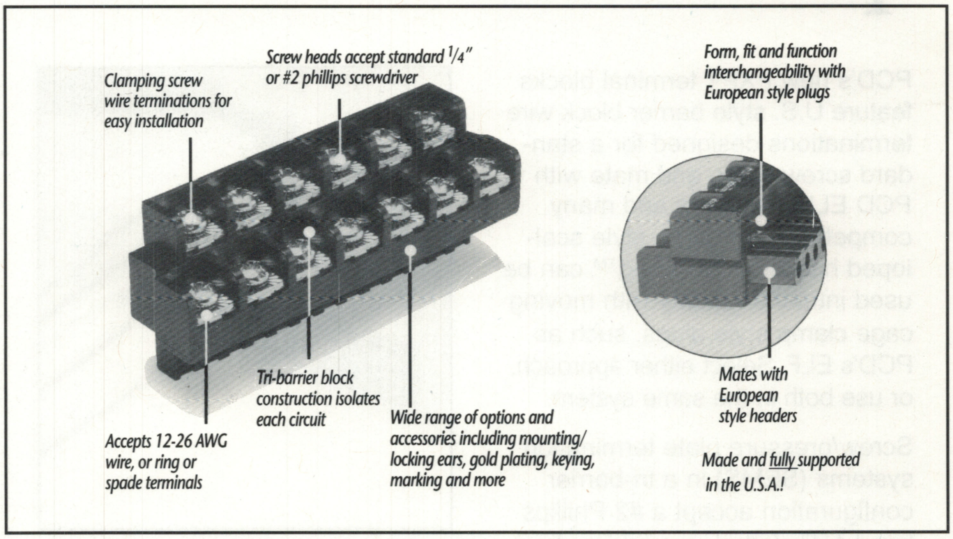


POS	CATALOG NO.	L"	STYLE	POS	CATALOG NO.	L"	STYLE
2	FXPT02200	0.67	A	14	FXPT14200	3.07	A
3	FXPT03200	0.87	B	15	FXPT15200	3.27	B
4	FXPT04200	1.07	A	16	FXPT26200	3.47	A
5	FXPT05200	1.27	B	17	FXPT17200	3.67	B
6	FXPT06200	1.47	A	18	FXPT18200	3.87	A
7	FXPT07200	1.67	B	19	FXPT19200	4.07	B
8	FXPT08200	1.87	A	20	FXPT20200	4.27	A
9	FXPT09200	2.07	B	21	FXPT21200	4.47	B
10	FXPT10200	2.27	A	22	FXPT22200	4.67	A
11	FXPT11200	2.47	B	23	FXPT23200	4.87	B
12	FXPT12200	2.67	A	24	FXPT24200	5.07	A
13	FXPT13200	2.87	B				

pcd FlexiPlug™ Accesories and Variations .200”

FLEXIPLUG™ OPTIONS

Optional accessories and variations, as detailed below, greatly expand the application range and flexibility of the FXP line. Please see the table below for assistance in part numbering, and contact PCD for additional details or application guidance. FXP plugs and ELF headers are available with selectively gold plated contacts for critical applications. In addition, both product lines offer keying tabs to ensure correct mating of connector elements. Specifications for these options are identical to those found on page 28.


Clamping screw wire terminations for easy installation
Screw heads accept standard 1/4" or #2 phillips screwdriver
Form, fit and function interchangeability with European style plugs
Tri-barrier block construction isolates each circuit
Mates with European style headers
Accepts 12-26 AWG wire, or ring or spade terminals
Wide range of options and accessories including mounting/locking ears, gold plating, keying, marking and more
Made and fully supported in the U.S.A.!

FXP PART NUMBERING GUIDE

PLATING, MOUNTING AND MARKING VARIATIONS

FXPT XX 2 X X

Add “E” as 10th digit to indicate locking/mounting ears

SIZE
(Number of positions)

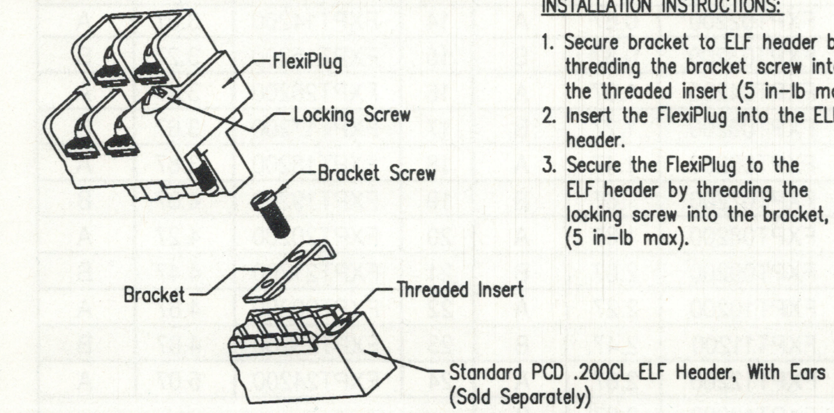
MARKING
0 = None

SPACING (.200”)

PLATING
0 = Tin-lead
1 = .000030” Gold

Contact PCD for specification details

Mounting Ear Assembly (Even Sizes)



INSTALLATION INSTRUCTIONS:

1. Secure bracket to ELF header by threading the bracket screw into the threaded insert (5 in-lb max).
2. Insert the FlexiPlug into the ELF header.
3. Secure the FlexiPlug to the ELF header by threading the locking screw into the bracket, (5 in-lb max).

LOCKING EARS

Integrally molded locking ears are available with all FXP plugs for use in high stress or high vibration applications, or where unintentional disconnect must be prevented.

Plug ears capture a floating, head locking screw which engages a threaded insert on the ELF header ear. The mounting screw is tightened after plug and header are mated, firmly securing the connection.

On plugs with an even number of contact positions, one locking screw must be offset from the header by using the FXPAD adapter (as illustrated below).

MARKING

FlexiPlug™ plugs are available with a variety of standard and special hot stamp markings. Please contact PCD to discuss requirements for special marking.

SPECIAL VARIATIONS

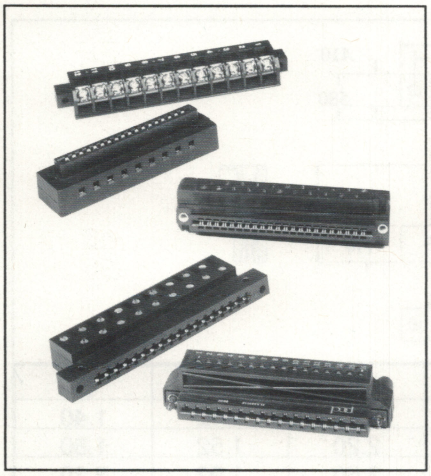
In addition to the standard FXP product variations indicated in this catalog, PCD is a leading supplier of special block configurations and modifications, tailored to meet unusual system design requirements.Contact PCD for further information.

Electrocon Screw Terminal/Edgecard Connectors

The PCD Electrocon line is a diverse family of rugged, high-reliability screw terminal/edgecard connectors which combine the discrete wire termination capability of a screw terminal block with the mass termination of an edgecard connector.

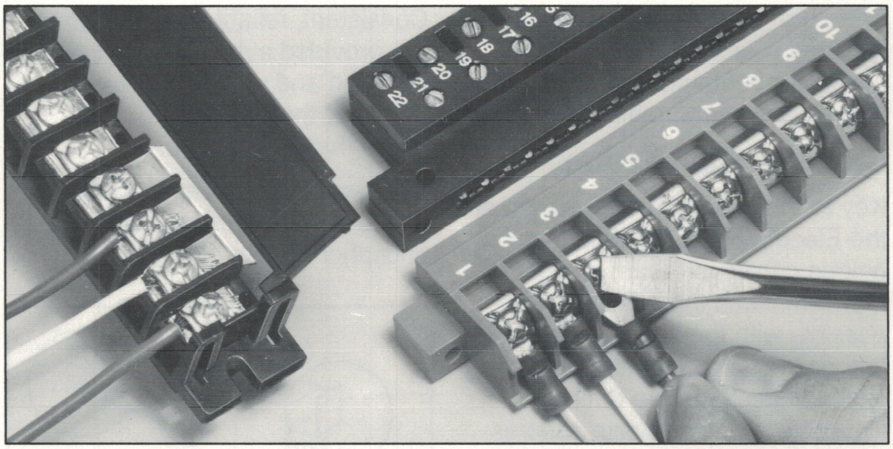
Electrocon connectors are designed specifically for instrumentation I/O, programmable/process controllers and other discrete wire-to-board interconnect applications.

The Electrocon line is available in a broad variety of mounting and application configurations, as indicated on the following pages, and in contact spacings ranging from .100" to .375". Depending on configuration, single- and double-sided versions are also available. Isothermal and electronic component packaging features are also available with some models.



Improved Contact Design

A primary performance feature and advantage of the entire Electrocon line is the use of precision-stamped and formed beam contacts - in either single or dual beam configurations - in all connectors. Based on PCD's many years of broad-ranging electronic connector design experience, and developed with the aid of solid modeling and stress analysis, PCD beam contacts offer significant advantages over the blanked tuning fork contacts traditionally used in similar connectors.



PCD Electrocon connectors and contacts are designed to accept a complete .054"-.071" range of board thickness, and function under extreme conditions of board warping, bending and motion. The beam contact eliminates the board and contact damage possible with tuning fork contacts under similar conditions.

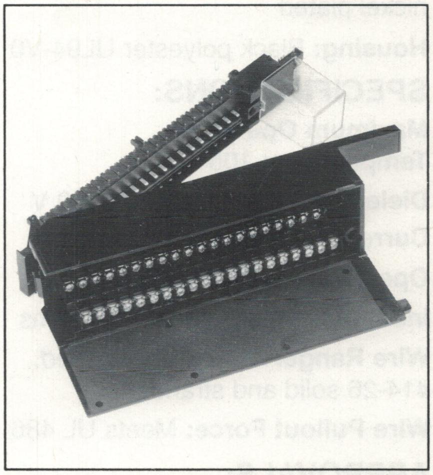
Wherever possible, contacts are pre-loaded. The pre-load guarantees high normal force and good electrical and mechanical contact with a minimum of contact deflection.

Selective Gold Plating

Stamped and formed contacts also allow PCD to take advantage of the selective plating process and provide a heavy gold plate where it counts - at the contact point. The use of selective plating also allows PCD to offer a gold-plated contact for industrial applications at little more than the cost of tin plating.

Special Connectors

In addition to the standard connector lines pictured on the following pages, PCD is also the industry's leading developer and supplier of specialty screw terminal/edgecard and screw barrier/edgecard connectors to meet specific application requirements. Focused on PLC and similar applications where the need for special identity and configurations is often paramount, these connectors combine standard PCD elements with unique features designed for the specific application.



If requirements exist for special developments, please contact PCD.

ELD Screw Terminal Edgecard Connector .200”

The .200” spacing Electrocon ELD features selectively gold-plated cantilever beam contacts and a vise clamp wire termination design.

Superior Connection

Key to the superior performance of the Electrocon ELD/200 is the unique cantilever beam contact that eliminates the board damage possible with the stamped tuning fork contacts traditionally used in such connectors. The dual cantilever beam contact also assures improved performance under board warping and bending conditions.

MATERIALS:

Contact: Phosphor bronze

Plating: .000030” selective gold over nickel (standard); alternates available

Hardware: #4-40 steel screw, nickel plated

Housing: Black polyester UL94-V0

SPECIFICATIONS:

Maximum Operating Temperature: 105° C

Dielectric Withstanding: 3000 V

Current Rating: 10 A

Operating Voltage: 300 V

Insulation Resistance: 10^{11} ohms

Wire Range: AWG #12 stranded, #14-26 solid and stranded.

Wire Pullout Force: Meets UL 486

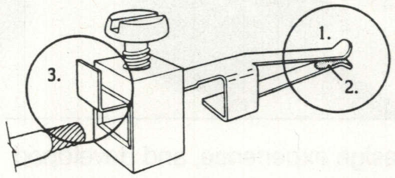
APPROVALS:

UL recognized under File No. E83421

Canadian Standards Association recognized under File No. LR69703-2

Consistent, reliable connections are provided even after repeated insertion and withdrawal cycles, and over the full .054” to .071” board thickness range.

Standard PCD plating is .000030” gold over a nickel underplate on phosphor bronze contacts.

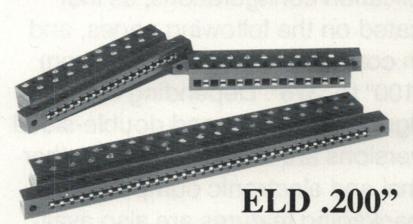


1. Dual Cantilever Beam Contact

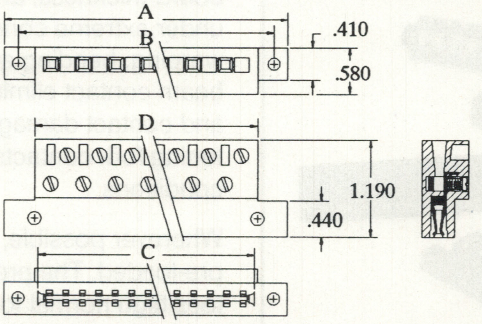
2. Selective .000030” Gold Plating at the board contact point.

3. Floating Vise Clamp

- **.200” SPACING**
- **6 TO 36 CONTACTS**
- **CANTILEVER BEAM CONTACTS**
- **VISE CLAMP WIRE TERMINATION**


ELD .200”

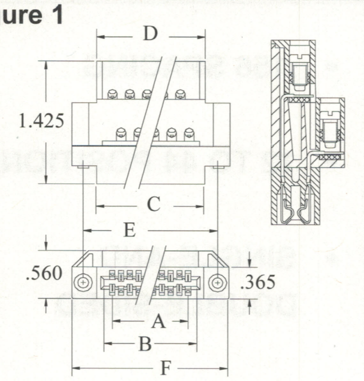
ELD .200" Spacing



POS	CATALOG #	A	B	C	D
6	ELD061100	2.15	1.80	1.12	1.40
8	ELD081100	2.55	2.20	1.52	1.80
10	ELD101100	2.95	2.60	1.92	2.20
12	ELD121100	3.35	3.00	2.32	2.60
15	ELD151100	3.95	3.60	2.92	3.00
16	ELD161100	4.15	3.80	3.12	3.60
18	ELD181100	4.55	4.20	3.52	3.80
20	ELD201100	4.95	4.60	3.92	4.20
22	ELD221100	5.35	5.00	4.32	4.60
24	ELD241100	5.75	5.40	4.72	5.00
30	ELD301100	6.95	6.60	5.92	5.40
32	ELD321100	7.35	7.00	6.32	6.60
34	ELD341100	7.75	7.40	6.72	7.00
36	ELD361100	8.15	7.80	7.12	7.40

ELH Screw Terminal/Edgecard Connector .100”

Figure 1



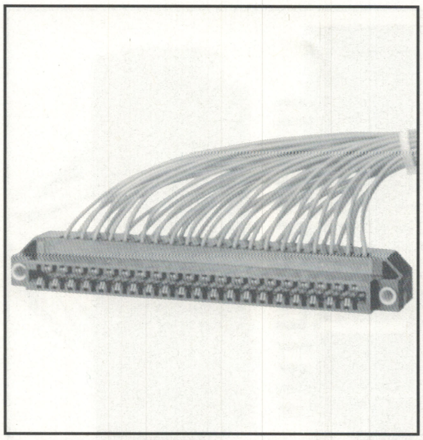
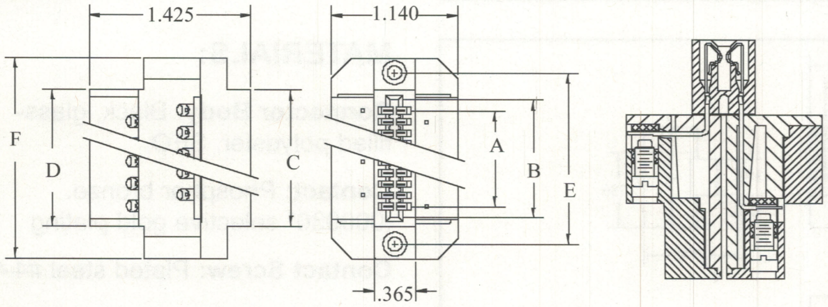


Figure 2



Single Density Specs

CATALOG NUMBER	NO. POS	A	B	C	D	E	F
ELH101100	10	.90	1.10	1.26	1.27	1.58	1.84
ELH201100	20	1.90	2.10	2.26	2.27	2.58	2.84
ELH251100	25	2.40	2.60	2.76	2.77	3.08	3.34
ELH301100	30	2.90	3.10	3.26	3.27	3.58	3.84
ELH401100	40	3.90	4.10	4.26	4.27	4.58	4.84

Double Density Specs

CATALOG NUMBER	NO. POS	A	B	C	D	E	F
ELH102100	20	.90	1.10	1.26	1.27	1.58	1.84
ELH152100	30	1.40	1.60	1.76	1.77	2.08	2.34
ELH202100	40	1.90	2.10	2.26	2.27	2.58	2.84
ELH252100	50	2.40	2.60	2.76	2.77	3.08	3.34
ELH302100	60	2.90	3.10	3.26	3.27	3.58	3.84
ELH402100	80	3.90	4.10	4.26	4.27	4.58	4.84

- **.100“ SPACING**
- **10 TO 80 CONTACTS**
- **HIGHEST DENSITY**
- **PRE-LOADED CONTACTS**
- **BIFURCATED CONTACTS**

The .100" spacing, high-density ELH screw terminal/edgecard connector features the highest contact density - 20 terminations per linear inch - of any screw termination connector system available. The ELH packages 80 I/O connections in a 4.85” x 1.15” envelope. The compact ELH offers new packaging possibilities to the industrial systems designer.

Single & Double Density

Connectors are available in single- and double-density versions and range in size from 10 (single-density) to 80 (double-density) contacts.

MATERIALS:

Housing: Black, glass-filled polyester UL94-V0

Contact: Phosphor bronze. .000030" selective gold plating

Wire Clamp: Brass, nickel plated

Screw: Steel, nickel plated

SPECIFICATIONS:

Wire Range: #14-26 AWG

Current Rating: 5A

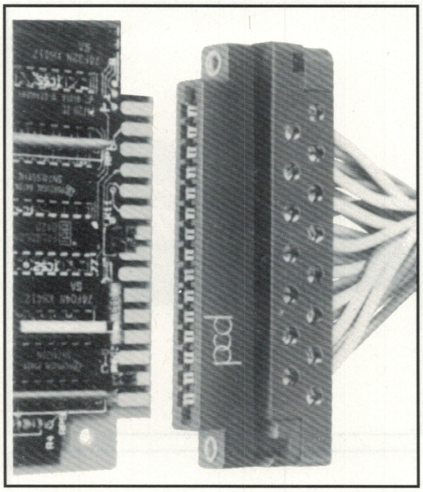
Insulation Resistance: 1011 ohms

Durability: 500 cycles in accordance with MIL-C-21097

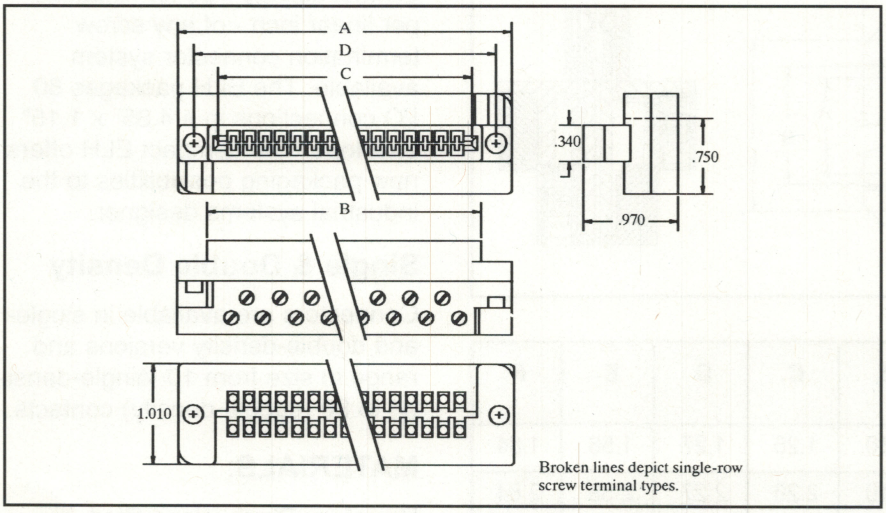
Wire Pullout Force: 35 lbs. minimum

ELC Screw Terminal Edgecard Connector .156"

ELC connectors are designed for panel mounting with bottom wire entry. The compact design provides in-line .156" wire-to-board spacing in single- or double-sided variations. Connectors accept AWG #14-#26 solid or stranded wire. Contacts feature .000030" gold on mating surfaces.



- **.156 SPACING**
- **12 TO 44 POSITIONS**
- **SINGLE-AND DOUBLE-SIDED**
- **BEAM CONTACTS**



Broken lines depict single-row screw terminal types.

Single-Sided Specs

CATALOG NUMBER	NO. POS	A	B	C	D
ELC122100	12	2.78	2.19	2.04	2.47
ELC152100	15	3.25	2.66	2.50	2.94
ELC182100	18	3.72	3.12	2.97	2.41
ELC222100	22	4.34	3.75	3.60	4.03

Double-Sided Specs

CATALOG NUMBER	NO. POS	A	B	C	D
ELC201100	20	2.47	1.88	1.72	2.16
ELC241100	24	2.78	2.19	2.04	2.47
ELC301100	30	3.25	2.66	2.50	2.94
ELC361100	36	3.72	3.12	2.97	2.41
ELC441100	44	4.34	3.75	3.60	4.03

MATERIALS:

Connector Body: Black, glass-filled polyester, SEO

Contact: Phosphor bronze. .000030" selective gold plating

Contact Screw: Plated steel #4-48

Mounting Screw: #4-40

SPECIFICATIONS:

Maximum Operating Temperature: 105°C

Voltage: 1800 VAC @ sea level

Current: Continuous 5 amps

Contact Resistance: Will not exceed 30 MV @ rated current

Insulation Resistance: 5000 Megohms min. @ 500 VDC

Wire Range: #14-26 AWG

Durability: 500 cycles in accordance with MIL-C-21097

Wire Pullout Force: 35 lbs minimum

APPROVAL:

UL recognized under File No. E83421

pcd

ELE Screw Barrier/Edgecard Connector .375"

The .375" spacing ELE offers selectively gold-plated cantilever beam contacts and an improved screw terminal design. Key to the superior performance of the ELE is its unique dual cantilever beam contact which eliminates the board damage possible with the stamped tuning fork contacts traditionally used in such connectors. It also ensures improved performance under board warping and bending conditions.

Contact design and manufacture ensure that selective gold plating is concentrated at the board contact point. This provides both better contact performance and lower cost than tuning forks whose constricted configuration makes it difficult to gold plate effectively or economically.

The ELE provides a high reliability wire termination with a #6-32 SEM nickel-plated steel screw and clamp, retained by a separate steel nut. This design eliminates the stripping of threads possible with connectors which thread the thin contact material to retain the clamping screw.

MATERIALS:

Contact: Phosphor bronze

Plating: .000030" selective gold over nickel (standard); alternates available

Hardware: Steel, zinc plated

Housing: Black phenylene oxide, UL94-V0

SPECIFICATIONS:

Maximum Operating Temperature: 95° C

Dielectric Withstanding: 3000 V

Current Range: 10 A

Operating Voltage: 300 V

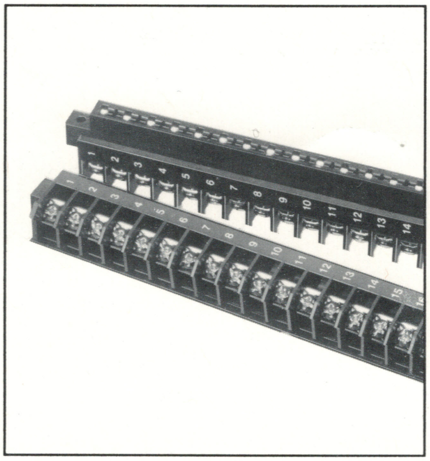
Insulation Resistance: 1011 ohms

Wire Range: #12-22 AWG

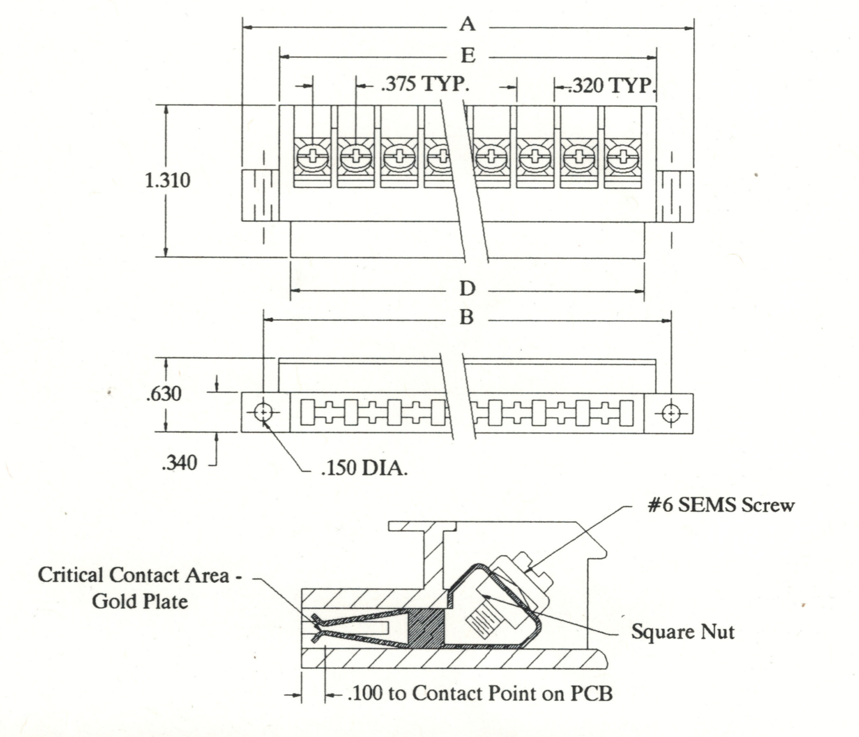
Wire Pullout Force: Meets UL 486

APPROVAL:

UL recognized under File No. E83421 for field wiring



- .375" SPACING
- 8 TO 28 CONTACTS
- 45° SCREW TERMINATION
- SEPARATE STEEL RETENTION NUT FOR GREATER TORQUE
- DUAL BEAM CONTACT



CATALOG NUMBER	NO. POS	A	B	C	D	E
ELE082110	8	3.75	3.38	2.75	2.91	3.11
ELE102110	10	4.50	4.13	3.50	3.66	3.86
ELE122110	12	5.25	4.88	4.25	4.41	4.61
ELE162110	16	6.75	6.38	5.75	5.91	6.11
ELE202110	20	8.25	7.88	7.25	7.41	7.61
ELE242110	24	9.75	9.38	8.75	8.91	9.11
ELE282110	28	11.25	10.88	10.25	10.41	10.61

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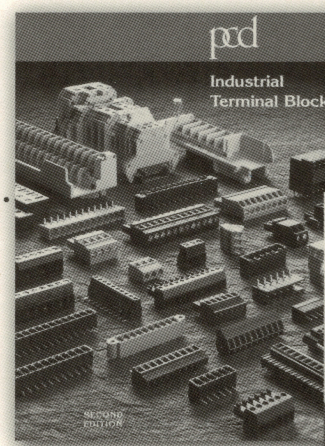
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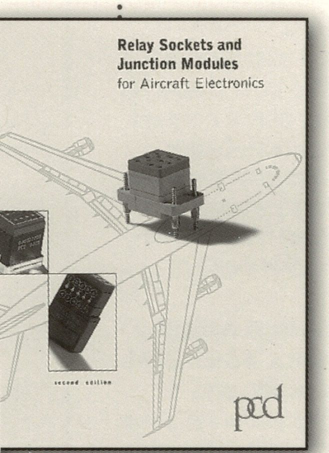
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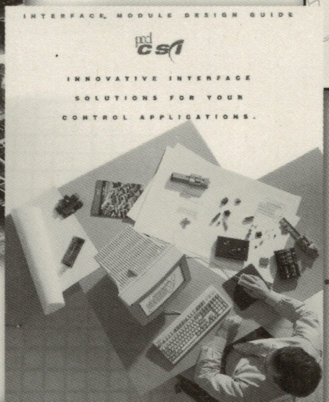
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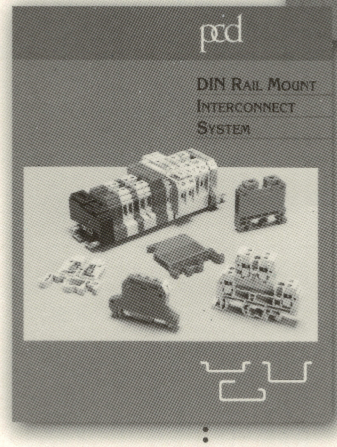
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